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ABSTRACT

The Experiment at Butte was a demonstration project designed to determine the effectiveness of the Joseph Tussman education model in an Adult Basic Education (ABE) program. Its major purpose was to combine in lessons the teaching of reflective skills with the teaching of ordinary ABE skills. To implement the Tussman model, three experimental groups and three control groups of teachers were formed. Problems were encountered with the development of reflective materials, and several inservice meetings were conducted to help teachers prepare reflective materials. Results indicated that: (1) the Tussman model could be implemented in and adjusted to an ABE program; (2) ABE students could deal with reflective materials adapted to suit their education levels and interests; and (3) the fact that four types of ABE students were identified in the study suggested a need for the development of alternative routes to ABE. Recommendations are made based on experience gained during the experiment, particularly a recommendation for a four-track program geared to the needs of: slow learners, skill oriented students, combined reflective and skill-oriented students, and nonskill students. Educational materials and student evaluations are appended. (Author/BP)

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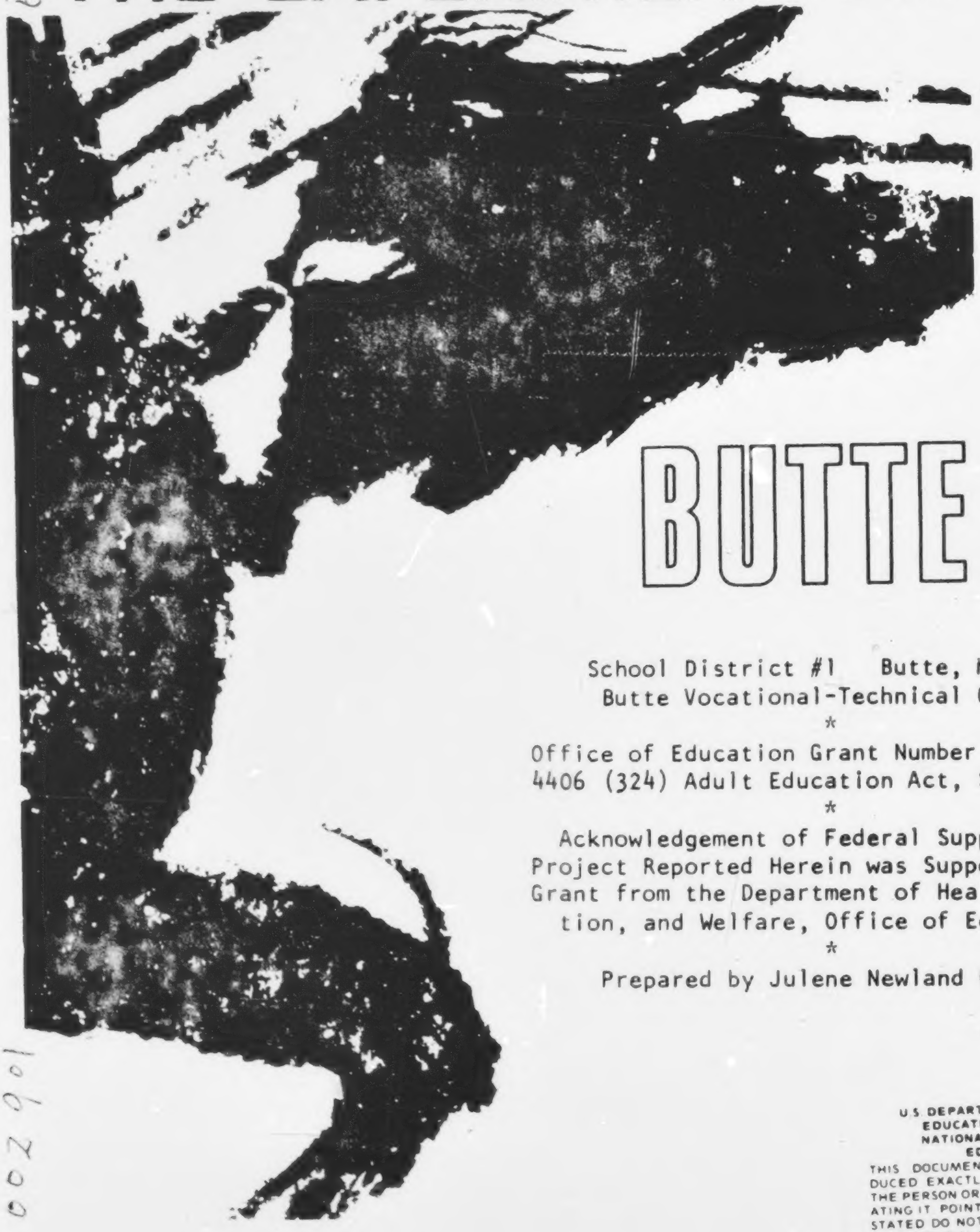

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Prepared by Julene Newland Pyfer

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THE EXPERIMENT AT BUTTE: A PROJECT DESIGNED TO INTRODUCE REFLECTIVE MATERIALS TO ABE STUDENTS

FINAL REPORT

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Butte, Montana
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To the teachers, teacher aides, and students of the Experiment at Butte I owe a great deal. Without their cooperation and enthusiasm this report could not have been prepared.

ABSTRACT

The Experiment at Butte was a demonstration project designed to determine the effectiveness of the Joseph Tussman education model in an ABE program. Its major purpose was to combine in lessons the teaching of reflective skills with the teaching of ordinary ABE skills. Other aims for the project were also set to more fully approximate the Tussman design. These aims called for drawing students into small educational groups in which teachers worked to develop an informal, relaxed feeling on the part of students. They avoided putting students on the spot and fostered a spirit of learning together at lessons. At the start of the project, personnel were not certain as to the feasibility of meeting such aims in an ABE program. The history of the project was filled with their attempts to see if these aims and the Tussman model itself were appropriate for dealing with adult education students.

To implement the Tussman model, three of the six teaching teams in the Experiment at Butte were asked to become part of an experimental group while the other three teaching teams were requested to continue using their ordinary teaching methods. This control group of teachers and teacher aides served as a comparison group.

Shortly before instruction began, humanities consultants conducted preservice training meetings to familiarize the project personnel with the nature of the Tussman model and ways to introduce reflective materials in lessons. After these, only one experimental teacher started to experiment with reflective materials during lessons. Until December, The Experiment did not really begin on a large scale. The turning point in the project was an in-depth inservice training session at which more specific details of the model and practical applications of reflective materials were explained. At this point, all experimental personnel began to engage in The Experiment. To help them solve problems encountered in these activities, several inservice learning meetings were conducted during the year. While working with reflective materials, the teachers shaped interaction at lessons in ways which encouraged students to reflect.

The Experiment at Butte pointed out several important conclusions. First was that the Tussman model could be implemented in and adjusted to an ABE program. Secondly, project personnel who worked with The Experiment learned that ABE students could, in fact, deal with reflective materials adapted to suit their educational levels and interests. They found that they were able to develop the reflective skills of students during ordinary lessons in which reflective skill learning was combined with ABE skill learning. Although The Experiment was not appropriate for all students, the Butte program demonstrated that using reflective materials was valuable to many students. The materials added interest to their studies and encouraged students to reflect more frequently in their lessons and in their daily lives. For some adults, reading and reflecting about humanities materials added new meaning to their adult education.

Revealed in the Experiment at Butte were four types of ABE students: slow learners, skill-oriented students, combined reflective and skill-oriented students, and nonskill students. These diverse types suggested the need for the development of alternative routes to ABE. In this report, a four-track program is therefore suggested. It stresses pluralism and flexibility and is designed to accommodate the specific needs of adult students.

Recommendations resulting from the experiences in the Experiment at Butte are applicable to the proposed four-track program. They suggest an extensive preservice and inservice training program for instructional personnel, grouping flexibilities, the use of program aides, and a creative form of administration.

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Chapter 1

BACKGROUND TO THE EXPERIMENT

INTRODUCTION

Many Americans are denied social and economic opportunities simply because they lack the basic skills of reading and writing and for creatively reflecting upon their place within society. Basic education for adults is intended to meet the needs of people who feel that they need more skills in order to compete with better educated adults and in order to live more fully and adequately.

Currently in the United States, classes in Adult Basic Education reach fewer than five per cent of the people who need them because adults are often not aware of the programs or find them limited or unappealing. The Experiment at Butte was an attempt to reach many of these kinds of adults by bringing ABE instruction to them in their homes or at neighborhood centers and by developing new vehicles for the delivery of an ABE curriculum. The program was designed to try to implement an experimental education model which combined the teaching of ABE core skills with the teaching of reflective skills.

The Experiment at Butte began on August 1, 1971, in Butte, Montana, and ended June 30, 1972. It developed from a previous 309-B adult basic education program, called Project Homebound, which was in operation in Butte during the 1970-1971 academic year. Both Project Homebound and the subsequent Experiment at Butte were administered by the

Vocational-Technical Center in Butte. Project Homebound, which was also an experimental demonstration project, made much progress in improving the delivery of ABE curriculums during its existence. In that project, teachers went into the homes of students instead of bringing the students into classroom situations. Teaching adults in their homes tended to foster more natural teaching and learning situations than were offered previously in ABE programs. Also, students taught in their homes did not have to publicly admit that they were undereducated. They therefore seemed more inclined to make use of and enjoy their ABE experiences.

The Experiment at Butte grew out of this earlier project and extracted several important traits from Project Homebound. As tutorials in adults' homes seemed beneficial to both teachers and students at the beginning of the adults' educational experiences, teachers in The Experiment 1971-1972 also began instruction by teaching in home situations. The structure of instructions was highly similar to the tutorial structure of the previous year during which teachers met with students on an individual basis, personalizing and gearing instruction to each adult as much as possible. In the Experiment at Butte, however, a greater attempt was made to draw as many students as possible into small instructional groups.

A second trait drawn from Project Homebound was the make-up of the instructional staff, which consisted of a number of teams each having a master teacher. With each teacher there was a full-time teacher aide. Teachers and aides hired for the Experiment at Butte were chosen from among people who had worked as a part of Project Homebound the previous year. They were therefore familiar with the characteristics of that project which were subsequently brought into the Experiment at Butte.

Many of the students who enrolled in the 1971-72 project had also been taught in Project Homebound by these teachers and teacher aides. They, too, were familiar with the tutorial method used in that project.

With these similarities, the spirit of Project Homebound, together with notions of its successes and drawbacks, was brought into the developing Experiment at Butte. Additionally, many preconceptions about students' traits, goals, likes, and dislikes came as a part of Homebound heritage. This provided perhaps the strongest link between the two programs and, as will be discussed in later sections of this report, was possibly the most difficult barrier to overcome in actually beginning the innovations of The Experiment.

Although there were many apparent similarities between the two Butte projects, the Experiment at Butte differed substantially from Project Homebound. The Experiment was designed to build upon the knowledge gained and contributions made by Project Homebound in resolving many of the problems of delivering a curriculum to adults seeking basic education. The new project sought to refine further the selection of educational settings most satisfactory for both students and teachers and to develop and test new vehicles for delivering the ABE curriculum. To this end, the Experiment at Butte was based upon the innovative educational model of Joseph Tussman, who tried an experimental approach to education at the University of California at Berkeley. Tussman, who was a student of Meiklejohn, developed his educational model from the Experimental College founded by Meilklejohn at the University of Wisconsin nearly fifty years ago. Professors and students at the University of Montana in Missoula and at other universities in North America have begun other similar experimental programs. To our knowledge, however, such a program has never been attempted in an ABE program other than the Butte experimental program. Ideas for the Experiment at Butte were derived from the findings reported by Tussman in his book Experiment at Berkeley,[1] and were adapted in order to make the Butte ABE program as highly attractive as possible to students and teachers and to make their resulting educational experiences more productive, enriching, and enjoyable than in traditional ABE programs.

In general, as Tussman suggested, the spirit of the Berkeley experiment involved the reorganization and redirection of educational energies on the part of teachers and students. It forced a reconsideration of the status and needs of students and called for a re-examination of basic curricular concepts.[2] In Butte, these same kinds of changes in teachers, students and parts of the curriculum had to be made in order to even begin The Experiment. Adjustments were made wherever necessary throughout the academic year in order to maintain the experimental nature of the program. The instructional aims set forth at the outset of the Experiment at Butte for the benefit of project personnel served to encompass Tussman's core ideas and to provide a guide to use in translating them into workable models of classroom interaction.

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[1] Joseph Tussman, Experiment at Berkeley (New York: Oxford University Press, 1969).

[2] Ibid., pp. xv, 4-5.

AIMS OF THE PROJECT

Instructional Aims

In order to implement the Berkeley design in the Experiment at Butte, certain aims were developed to make clear the specific changes and planned goals of experiment participants, including students, teachers, teacher aides, and administrators. Fundamental aims to carry out the Tussman design were the following: 1. The Experiment sought to make students and teachers more responsive and to help them synthesize their needs, desires, and activities. 2. Another aim was to help students to cooperate and show concern for each other rather than compete in traditional classroom ways. 3. Teachers were to attempt to avoid making the student feel as if all attention in the group were focused upon him. Instead, students and teachers focused their attentions on subject matter and ideas so that learning would be an experience for the teacher as well as the student. 4. Also, deliberate attempts were to be continually made to give each student the feeling that he was contributing something significant to the program. This feeling was to be fostered at tutorials and group meetings alike. 5. From the beginning, collegial teaching and learning were supposed to be encouraged and expected. In effect, everyone was to be encouraged to feel as if he were going to school with everyone else both within and among educational groups. Teachers were therefore expected to learn from their teaching experiences and to share them with other teachers in the program. Tussman referred to this as vitally important to the Experiment and called it the development of a "community of teachers."[3] Teachers were to be reminded of the necessity for this continually, since such an esprit de corps would be important in keeping with the spirit of The Experiment. 6. An especially important aim requiring much change on the part of students and teachers was that teachers were to be expected to present themselves, not as occupants of positions on educational pedestals nor as experts or advocates of the traditional model of instruction and explanation, but as guides, helpers, and fellow students. Failure to meet this aim might mean failure in using experimental instructional materials. 7. Finally, as Tussman emphasized throughout his book, although students should actively participate in developing vehicles for delivering the curriculum, they should not determine the specific content.[4]

Reflection as an Aim

A focal point of change, however, was not only to alter the form of students and teachers' interactions as stated in the preceeding aims, but also to make significant and useful additions to some of the materials used in ABE curriculums to make them more enjoyable and enriching for teachers and students. Paralleling the Berkeley experiment which was intended to help students learn to be reflective, responsive and more fully educated individuals,[5] humanities materials, selected by teachers and consultants to The Experiment, were to be added to certain students' curriculums to see if such an endeavor would be successful or applicable to ABE students. (A further discussion of consultants' roles in the project and more specific details of the use of reflective materials will be presented later in this report.)

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[3] _Ibid_., p. 11.

[4] _Ibid_., pp. 47-65.

[5] _Ibid_., p. 51.

To stimulate reflective thinking, humanities materials were not used simply as sources of objective facts about how man thought about his problems in the past. Instead, in the experimental program, following consultants' suggestions, studying these materials was designed to lead to the development of critical attitudes toward claims of knowledge and value. Teachers were to bring this about by exposing students to various attitudes which men have held historically about human problems. This use of the humanities and other related materials was to suggest the rather narrow character of belief and opinion. Accordingly, reading humanities materials was seen to develop students' minds by presenting topics about which they might reflect. To stimulate reflection teachers were asked 1. to expose their ABE students to critical thought, 2. to expose them to the presuppositions of current thought, and, finally, 3. to suggest alternative possible ways of thinking. Therefore, attention was concentrated on bringing the substance of a great work into tension with each student's opinions. The student was encouraged not simply to learn what was in the work, but to come, personally, to terms with what was found there.

Important reasons for wanting to develop ABE students' reflective skills therefore paralleled Tussman's in that teachers in The Experiment sought through new materials and discussions to suggest alternative ways of thinking about certain topics of concern to help each student recognize the range of choices in thought and behavior open to him, to encourage the student to be thoughtful and questioning about others' opinions and statements, to add additional interest and enjoyment to the students' lessons, and to foster a broadening in the scope of ABE in general.

EVALUATION PROCEDURES

As stated previously, the Experiment at Butte was a demonstration project designed to develop and test new ways of delivering an ABE curriculum to students in Butte, Montana, based on many of the educational ideas of Joseph Tussman of the University of California at Berkeley. The experimental nature of the program model demanded innovations in such things as the ways students and teachers interacted with each other, the relationship among teachers as a group, the interaction between teachers and the administrators, and in some of the materials used in delivering the ABE curriculum itself. Because this program existed only in Butte, its unique character also called for a method for evaluation which would not only point out its successes, failures and the bases for these, but would also provide as full a description as possible of the historical development of the program in its entirety which would be grounded or embedded in the data gathered. This in-depth account could then be used as a source of knowledge for others interested in replicating The Experiment in other cities for other groups of ABE students. In instituting their own programs, they would then be able to learn from the accounts of our mistakes and from our resulting suggestions.

The goals of this evaluation and the research methods selected were therefore designed to develop useful statements about this project and to provide an extensive description of the historical development of The Experimentin which details of any changes, successes, and failures of all kinds encountered by project personnel were cited and explained. In such a project, even the most minute changes, successes, and failures were important to note.

To determine successes and failures, events in the program were constantly compared with the aims for The Experiment set forth at the beginning of this chapter to see how well these aims were met throughout the course of the project. Areas of evaluation concern thus centered upon the new ways of interacting which teachers, administrators, and students developed as a result of The Experiment, and upon the effect on students and teachers of the newly added humanities materials to see to what extent reflective capabilities could be developed as a part of ABE training. Changes brought about by adding these materials were noted.

Methods of Research

As this evaluation research was intended to produce descriptive statements about the Experiment at Butte, essentially qualitative methods for research were selected. There were numerous reasons for this. Primarily, as stated by Glaser and Strauss, the crucial elements for building sociological theory are often found best with a qualitative method. Qualitative research is often the most "adequate" and "efficient" way to obtain the type of information required and to contend with the difficulties of an empirical situation.[6] Its flexibility was desirable since the goal of research was generating, especially, rather than verifying knowledge. It could account for change and process evident in this particular kind of project as well.

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[6] Barney G. Glaser and Anselm L. Strauss, The Discovery of Grounded Theory, Strategies for Qualitative Research (Chicago: Aldine Publishing Company, 1970), p. 18.

Since various research methods represent different lines of action taken toward the empirical world, each research method reveals peculiar elements of symbolic reality. Additionally, each researcher lends unique interpretations to these methods. The use of multiple methods is a plan of action which raises sociologists above these personalistic biases that stem from single methodologies.[7] In this research, such a line of action was called for in order to develop an adequate description of the Experiment at Butte. Denzin described this approach as triangulation, the use of multiple methods in collecting data which involve combining dissimilar methods to investigate the same things. The rational for this strategy was that the flaws of one method were often the strengths of another, and by combining methods, researchers could achieve the best of each, while overcoming their unique deficiencies.[8] For this study, then, participant observation involving a number of collection methods and data sources were used, rather than only one. Also, to triangulate investigators, the evaluation consultants and humanities consultants assisted the evaluator in making observations and in interviewing. Discussion meetings followed trips into the field. During these,data and ideas were shared and appraised.

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[7] Norman K. Denzin, The Research Act (Chicago: Aldine Publishing Company, 1970), pp. 298-301.

[8] Ibid., p. 308.

Interviews. For the most part, data were obtained by a series of confidential interviews, many of which were tape-recorded, with a wide range of students, all of the master teachers and teacher aides, project administrators, and consultants. According to Denzin, there are three major kinds of interviews that are classified by their degree of structuring or standardization. At the most structured level is the schedule standardized interview. In this form, the wording and order of all questions are the same for all informants. Second is the nonschedule standardized interview in which the interviewer works with a list of the information required from each informant, but the particular phrasing of questions and their order is redefined to fit the characteristics of each informant. This is often called a focused interview. It allows a much greater degree of freedom in gathering data. The third basic type is the nonstandardized interview. In it, no prespecified set of questions is employed, nor are questions asked in a specific order. Interviews take on the character of an informal friendly conversation.[9]

In this project, both the nonschedule standardized interview form and the nonstandardized form of interviews were used. In order to develop an interview schedule to be used as the basis for further research, completely nonstandardized interviews were conducted at first. Thereby, informants were used to suggest possible topics of inquiry that had not been fully or intentionally accounted for previously. The interview schedule that resulted seemed to elicit information about topics of importance to the evaluation, such as the comparison of aims with actual occurrences in the program, as well as stimulate further discussion on the part of many informants. It seemed, however, especially useful to combine both approaches in a single interview so that certain information was obtained from all informants, while an emphasis of nonscheduled items could also be included. Throughout, a conversational, very informal tone pervaded all interviews. Interviews with teachers and teacher aides were especially conversational. Gearing the approach to each particular respondent seemed to elicit the most information possible. As Maccoby and Maccoby suggest, the unstructured, nonstandardized interview is best suited for exploratory studies, while highly structured, schedule standardized interviews are often best suited for hypothesis testing. Ascertaining respondent meanings and definitions is also easier if done in a fairly unstructured manner.[10]

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[9] Ibid., pp. 123-126.

Interviewing began in October, 1971, and continued throughout the year. At the start of the project, interviews included, among other topics, a discussion of the experimental project in general and the participants conceptions of it, general and specific expectations for the project and people involved in it, problems of "getting started," such as selecting appropriate teaching materials and grouping students, and notions about and attitudes toward reflection. Teachers, students, administrators, and consultants alike were asked to address themselves to these topics. Informants themselves suggested further topics of concern appropriate to the description of the project. Their natural theories of this project recounted during interviews were the important bases for the statements made in this report.

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[10] Ibid., p. 127.

Throughout the project, teachers, teacher aides, administrators, and consultants were reinterviewed continually to discuss topics derived from dominant themes appearing in the initial interviews and to pursue topics about which the informants had talked previously but which needed further clarification. By this time, all informants, including students being initially interviewed later in the year, were asked to react to statements concerning the project which were gradually generated from existing data. An attempt was made to constantly revise and reformulate developing statements.

Observing. In addition to interviewing participants in the Experiment at Butte, careful observations were an important part of data collection. As in interviewing, the evaluator carried out most of the observations. However, evaluation consultants also participated in doing other observations to provide a basis for comparing resulting data. The humanities consultants, who also observed project participants, were able to contribute significantly to the evaluator's knowledge and used their observation data to further refine and revamp their consulting techniques in The Experiment.

Of four field observation roles that have been analyzed,[11] observers in the Experiment at Butte chose to assume the participant-as-observer role. As participant-as-observer, the researcher made his presence as an investigator known and attempted to form a series of relationships with subjects such that they served both as respondents and informants. As in many community studies, the observer developed relationships with informants through a long period of time. As Denzin anticipated, in this role the observer was relieved of the tension that arises from role pretense, but still had to contend with problems of establishing relationships, not going native, finding informants among students, and maintaining the observer-observed relationship.[12] These, however, were easily dealt with in time, making observations worthwhile and easy to accomplish.

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[11] Raymond L. Gold, "Roles in Sociological Field Observations," Social Forces, XXXVI (March, 1958), pp. 217-23.

The office where teachers, teacher aides, and the project coordinator regularly met served as one location for observations and interviews. Other locations were the various instructional meeting places, including students' and teachers' homes, neighborhood centers, and others. At the office the relationships of teacher to teacher, teacher to teacher aide, and teacher to administrator, were especially interesting to observe. Specific instructional encounters, such as group lessons and tutorials, were observed in the other locations listed above. At these, it was important for the evaluation to watch exactly how the lessons and tutorials proceeded by paying attention to such things as the ways in which teachers selected and presented materials and helped their students to discuss and reflect upon various topics, the forms in interaction between teachers and students, the peculiar characteristics of the home as an educational setting, and others.

Observations served to clarify or redefine topics revealed in interview conversations and to suggest new topics about which informants in later interviews could be questioned. Observing lessons provided an opportunity for the evaluator to meet and become familiar with many of the students who were subsequently included among interview informants. Additionally, observing helped the evaluator take the perspective of project participants and view the program from teachers' and students' points of view.

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[12] Denzin, op. cit., p. 191.

Life histories. To provide still more in-depth data about developments in the Experiment at Butte, the materials and procedures used, the teachers and their students, teachers were asked to submit evaluation sheets for each of their students. These resemble what Denzin called "edited topical life histories."[13] Teachers were notified of this task approximately one and one half months before the end of the project and were asked to complete them by the end of May. The evaluation on each sheet included as much data as possible about personal variables, such as the student's age, sex, nationality, previous educational experiences, home learning situations, goals, and others; instructional information, such as the teaching materials and methods used, the teacher's views of his own and the student's progress, specific noticeable changes in the student, particular difficulties, recommendations pertaining to the student, diagnostic test scores, if appropriate, comments on The Experiment in relation to the particular student, and so on were appropriate to include. These individual evaluations helped especially to augment or refine interview and observational data used in this evaluation research. They also provided an important contribution to each student's file which will be useful if the student participates in a subsequent adult education program. In compiling the individual evaluations, teachers, too, had an opportunity to assess their own teaching progress and develop criteria for identifying their successes and failures. Examples of these individual evaluation sheets are included in the Appendix of this report.

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[13] Ibid., pp. 222-223.

Seminars. At approximately two-month intervals, the evaluator held two- to three-hour seminars with teachers, teacher aides, administrators, and consultants. The purpose of the seminars was to discuss more fully and collectively the topics generated in interviews or by observations which needed clarification. They served also to provide an opportunity for participants to vent or solve problems and misunderstandings pertaining to the program and, especially, to the experimental parts of it. Suggestions and specific data from these meetings became integral parts of further interviews and observations and were, therefore, essential and beneficial to this evaluation. Seminars with teachers, teacher aides, and administrators, or with the administrators alone augmented the feedback function of the evaluation in that it provided a time for the evaluator and consultants to make suggestions or recommendations helpful to The Experiment. A further discussion of this feedback function is included in the section of this report entitled "Personnel."

Field diary. Finally, the last research method used in evaluating the Experiment at Butte was a comprehensive field diary compiled by the evaluator. This field diary was a personal account of research experiences beginning at the start of The Experiment and ending at the completion of the final report. Topics included in it were personal impressions of informants and research situations, new ideas for further research, subjective discussions about observations or interviews, initial suggestions for recommendations, observations about the developing interaction among project personnel, and many others. These field notes, recorded after individual interviews and observations or after a complete day in the field, were not intended to replace the more formal research notes recorded during investigative encounters. Instead, they were designed to augment the more formal notes and interview transcripts by being a repository of subjective data pertaining to and often giving the researcher new insights into major topics of concern. It provided a different and unique perspective of things being investigated in the other ways already mentioned.

These, then, were the major collection methods used in compiling this evaluation report. Attempts were made wherever possible to triangulate methods, data, and investigators.

Classifying the Data

Once initial data were collected and interviews transcribed from tapes, a natural classification scheme of topics was developed from the data. The analysis of interviews was a continuous process. Data were repeatedly studied in order to constantly reformulate questions or statements to make them more effective or applicable to the informants' real world. Glaser and Strauss speak of this as comparative analysis. By collecting different and varied information bearing on individual categories, these categories directly generated from the data were therefore thoroughly investigated. In Glaser and Strauss' terms they appeared to fit the situation being researched and worked when put into use. By "fit" Glaser and Strauss mean that the categories must be readily (not forcibly) applicable and indicated by the data under study; by "work" they mean that they must be meaningfully relevant to and be able to explain the behavior under study.[14] These categories served as the key through which the historical account, evaluation statements, and recommendations were directly derived. All of the statements used to illustrate or substantiate the findings of this research pertaining to each topic are verbatim accounts of conversations with informants. The statements and findings of this report are therefore "grounded" in and exemplified by data gathered during this research.

Theoretical Sampling

The type of sampling employed in this research is called, by Glaser and Strauss, "theoretical sampling" and may be contrasted with statistical, or random, sampling. Theoretical sampling is done in order to discover categories and their properties, and to suggest casting interrelationships into a theory. Statistical sampling is done to obtain accurate evidence on the distribution of people among categories to be used for generalized descriptions or verifications. Thus, in each type of research the "adequate sample" that we should look for is very different.

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[14] Glaser and Strauss, The Discovery of Grounded Theory, Strategies for Qualitative Research, pp. 2-5.

The adequate theoretical sample is judged on the basis of how widely and diversely the analyst chose his groups for saturating categories according to the type of theory he wished to develop. The adequate statistical sample, on the other hand, is judged on the basis of techniques of random and stratified sampling.

The researcher who generates theory need not combine random with theoretical sampling when setting forth relationships among categories and properties. These relationships are suggested as hypotheses pertinent to the direction of the relationship, not tested as descriptions of both direction and magnitude.

Furthermore, once discovered, the relationship is assumed to persist in direction no matter how biased the sample is. Only if the hypothesis is disproven do biases in the sample come under question. For generating theory, these biases are treated as conditions changing the relationship and should be woven into the analysis as such.[15] Sampling procedures in this research followed these principles.

Experimental and control groups. In order to provide a basis for comparing experimental with events that would normally occur without the addition of The Experiment, the six teaching teams, which were mentioned at the start of this report, were placed in either an experimental group or a control group. Their placement is discussed further in Chapter Two. Teachers in the experimental group were requested to try to meet the aims of The Experiment set forth at the start of the report. They were therefore charged with the task of instituting changes in forms of interaction among themselves and with their students and in some of the materials employed in an ABE curriculum. Specifically, they sought to parallel Tussman's experimental program by helping and encouraging their students to be reflective persons through using new teaching techniques and humanities or other reflective materials. Teachers in the control group were asked to carry on their usual instructional methods throughout the year without making the substantial and deliberate changes required by The Experiment. Both groups, however, maintained their meeting places in the same room and were not permanently separated spatially. Similarly, they were encouraged to communicate with each other and continue to share ideas about dealing with students, presenting materials, or selecting materials, except for those ideas and materials specifically intended for use in The Experiment alone.

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[15] _Ibid._, pp. 62-64.

Once grouped, there were three teaching teams in the experimental group and three teams in the control group. Of the three experimental teams, two were designated as "basic." That is, their students were to be those to whom skills below the sixth grade were taught. The other experimental team was designated as "GED." Students in this team were to be those who were taught seventh grade through high school level skills and whose goals generally included the attainment of the GED certificate. Of the three teams in the control group, one was designated as basic while the other two were GED teams.

Selecting the informants to be interviewed followed the principles set forth in the section of this report entitled "Theoretical Sampling."

Initially, all of the six teachers and seven teacher aides, and two administrators were interviewed formally and in informal conversations. Throughout the program they were reinterviewed whenever new information could be added to existing topical categories or their properties or new categories could be created.

Students who were interviewed were selected from both the experimental and control group student rosters. Empirically they were distinguished as experimental basic students, experimental GED students, control basic students, and control GED students. Some of the students in the program were considered intermediate students in that their skill level was thought to fall between grade school and high school levels. These were ordinarily assigned to GED teams. They, too, were either experimental or control group students depending upon the team to which they were assigned. Individual students who were chosen for the interview sample were included for several reasons. Initially, teachers' suggestions were of great importance in sampling. They were able to suggest students whose characteristics exemplified ideas and traits teachers discussed during interviews and seminars. They suggested a wide range of informants: male and female students representative of various income levels, abilities, life styles, and goals. This served to develop diverse categories and add wide information to existing categories. Teachers' natural ways of classifying students also became evident in their ways of suggesting informants. This proved additionally useful in developing the typology of students explained in Chapters Four and Five.

During a number of interviews with students, the informants themselves suggested the names of other students with whom they thought an interview might be or should be conducted. Ordinarily, they suggested other adults in the program whose ideas were either highly similar to their own or very different. In many cases the suggested students were those with whom they participated in group lessons.

The remainder of interviewed students were participants in lessons or tutorials that the evaluator or consultants had observed during the course of the project. Ordinarily, questions about the students' personal qualities, lesson experiences, or comments prompted their being included. Often they had also been suggested by teachers.

Certain students who terminated their involvement in the program prior to the end of the program or before they had reached their stated academic goals were considered drop-outs. Many of these were also interviewed in order to discover their reasons for discontinuing their studies and their impressions of the program in general. Official drop-out lists compiled by the project coordinator and teachers' suggestions provided the names of these drop-outs. They are discussed in greater detail in Chapter Three.

At the start of this research no arbitrary number of informants to be interviewed or observed was set, nor did the research design specify the number of times informants, including the staff or students, should be interviewed or observed. Instead, as interviewing, observing, and developing categories suggested by data proceeded sampling was stopped once a point of theoretical saturation of categories was reached. Saturation means that no additional data are being found whereby the sociologist can develop properties of the category. As similar instances appeared and reappeared with each subsequent interview or observation, categories were believed to be saturated.[16] At this point, sampling informants for initial or additional interviews or for observations stopped. This applied to teachers, teacher aides, administrators, consultants, and all sampled students, including drop-out students.

For this research the theoretical sample of students interviewed as program participants was made up of a total of 75 students. Of this total, 42 were students of teachers and teacher aides in the experimental group and 33 were students of teachers and teacher aides in the control group. In the experimental group sample, 28 were students of the two teams classified as basic and 14 were students in the team classified as GED. In the control group sample, 9 were students of the single basic team and 24 were students of the two GED teams.

The drop-out sample included 18 students. Six of these were from basic teams and 12 were from GED teams.

As mentioned, all of the six teachers and seven teacher aides were interviewed and reinterviewed. All teachers were observed while involved in tutorials or group lessons where their teacher aides often assisted in the instruction. Some of the teacher aides were observed while involved in giving their own tutorials. All were interviewed continually until categories of information were adequately saturated. Since conversations with them were so frequent, highly informal, and conversational in tone, no attempt was made to count specific times they occurred during the year.

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[16] Glaser and Strauss, The Discovery of Grounded Theory, Strategies for Qualitative Research, pp. 63, 64.

Consultants and the evaluator observed at least twenty-five group lessons or tutorials at various stages throughout the instructional year. Approximately 70 per cent of these observed lessons were experimental. Particular attention was paid to changes in experimental teachers' methods or materials, specific changes in students' behavior, goals, or attitudes in the program, and other items discussed previously in the section of this report entitled "Observing."

Using the methodology described in this section to evaluate the Experiment at Butte, the following historical account, statements about The Experiment, and recommendations concerning the project were developed.

IMPLEMENTATION OF AIMS: THE SOCIAL ORGANIZATION OF THE PROJECT

Project Personnel

In order to develop and carry out the Experiment at Butte the personnel hired to be part of the project were those individuals who were interested in teaching adults, expressed an interest in the concept of The Experiment, showed a willingness to learn and develop new and unconventional ways of teaching adults, and who were experienced adult educators from their participation in other adult basic education programs. Project personnel included a project director, project coordinator, six master teachers, seven teacher aides, an evaluator, two evaluation consultants, and two humanities consultants. A brief summary of their prescribed activities in the program is presented on the following pages.

Administration of the Experiment at Butte was handled by Dave Keltz, project director and assistant director of the Butte Vocational-Technical Center, and Herb Venner, project coordinator. The project director served as the coordinator of Adult Basic Education at the Butte Vocational-Technical Center. He was responsible for overall administration of the project. The project coordinator's job required him to serve as the integrator of the academic aspects of the project, which involved pairing teachers and teacher aids into teams, coordinating experimental and control group teams, assigning students to appropriate teams for instruction, ordering any necessary educational materials, overseeing and working closely with the teachers' activities, acting as a resource person for advice in carrying out The Experiment, and making certain that all attempts were being made wherever and whenever possible to implement The Experiment. Both the director and coordinator were involved in public relations activities in Butte and were charged with establishing a laison with the consultants from the University of Montana who were in charge of inservice and preservice training activities. The experimental nature of the program offered many and varied opportunities for experimenting in administrative techniques. Recommendations for administrating The Experiment are discussed in Chapter Five.

The evaluator for The Experiment was Julene Newland Pyfer, a research sociologist from the University of Montana. The evaluator's responsibilities were concerned with developing research methods which gathered adequate data to allow the development of an ongoing historical account of the project in which positive and negative statements about The Experiment and related recommendations were presented. Additionally, she provided all experimental personnel with continual feedback of importance to The Experiment in individual meetings with administrators, teachers, or consultants or together during many of the seminars held during the year. Providing suggestions for improving the use of reflective materials, ideas for better implementing experiment aims, and students' impressions of their instruction revealed during interviews were examples of the kind of feedback information exchanged. As a result, the evaluator often participated in inservice training sessions whenever it seemed appropriate. Another duty of the evaluator involved acting as a liaison between the Butte project and the University of Montana consultants by carrying consultants' suggestions to the instructional staff and administrators and discussing developments in The Experiment with consultants. Finally, the evaluator was responsible for compiling and writing this final report.

Evaluation consultants were two experienced research sociologists, Raymond L. Gold, Ph.D. and Jon J. Driessen, Ph.D., members of the Technical Assistance Bureau of the Institute for Social Science Research, a part of the University of Montana. They assisted the evaluator by providing methodological, theoretical, and technical advice appropriate to the evaluation. They also engaged in some interviewing and observing to help them in their consulting roles and to provide data with which the evaluator's data were compared. Evaluation consultants participated in organizing inservice training sessions.

Teachers in the program, as previously mentioned, were divided into two major groups for purposes of evaluation: experimental teachers and control group teachers. Experimental teachers were Carlin Good, Mary Madlena, and Lynn Hinch. (Lynn replaced Pat Cork who left the program during the middle of the year upon moving from Butte.) Carlin and Mary taught basic curriculums. Lynn taught a GED curriculum. Control group teachers were Vernetta Kommers, who taught a basic curriculum, and Jim Connolly and Jean Lind, who taught GED curriculums. As discussed previously, control group teachers were expected to bring ABE curriculums to their students in many of the same ways and by employing many of the successful ABE materials used in Project Homebound the previous year. Administrators encouraged them to use the various kinds of ABE workbooks that were available to them, while including extra materials of their own choosing as they saw fit. Extra reading materials, newspapers, specific literary works, and math exercises were among those additions. They were not advised by consultants, however, as to how to use those materials in ways that pertained to the reflective aims of The Experiment. However, it is important to note that because of their experiences from and methods developed during Project Homebound, not one of the teachers in the program was actually traditional or conventional in his instruction methods. In this sense, all master teachers were actually "experimental," though half of them formed the control group and were not deliberately trying to achieve the aims of the experimental part of this project derived from Tussman's ideas. Experimental teachers were also requested to integrate many of the traditional ABE materials into their teaching. They were, however, expected to meet experiment aims in developing new forms of instructional interaction with their students and in using and devising humanities and other reflective materials during the course of ordinary lessons to encourage the development of thoughtful, reflective qualities in their students. Experimental teachers were required to attend all learning sessions, such as preservice or inservice training meetings held by project consultants.

Hiring practices for both experimental and control teachers were similar in that administrators expected all teachers to be experienced in adult education methods, interested in their students, and willing to develop innovative approaches to teaching an ABE curriculum. All master teachers held bachelor's degrees.

Teacher aides. There were seven teacher aides in the program: Dulcie Allen, Georgia Becky, Orville Brain, Terri Byrne, Mary Hannifin, Junie Maloney, and Alberta Rowe. The teacher aides assisted the master teachers to whom they were assigned. Georgia and Junie served as aides to a single master teacher, resulting in six teaching teams in the project. Aides' primary duties involved helping teachers in preparing instructional materials, tutoring students needing help in various phases of their work, working with teachers in planning and participating in lessons, and attending all inservice sessions or other meetings with teachers that were devoted to learning new facets of adult basic education. Contact with master teachers while planning and discussing materials and lessons served as the aides' most frequent and helpful time to perfect and discover teaching methods and other information pertaining to teaching adults. Master teachers were responsible for seeing that both their students and their aides were performing adequately.

Humanities consultants, Tom Huff, Ph.D. and Gail Wallis, from the University of Montana Philosophy Department, participated in the Experiment at Butte as advisors to project directors and to the experimental teachers and their aides. Since these consultants were participants in the previously mentioned Experimental Humanities Program at the University their experience was valuable in the Experiment at Butte. They were therefore in charge of preservice and inservice training activities for the project and also became involved with assisting teachers on a one-to-one basis with their individual problems or questions concerning experimental methods or materials. They provided experimental teachers and teacher aides with a series of humanities selections to be used in experimental students' lessons and to serve as examples for using materials developed by the teachers themselves.

The Relationship between Personnel

In order to maintain the sort of spirit called for by The Experiment and a strong esprit de corps, which Tussman suggests as being vitally important to achieving experiment goals, the relationship of each staff member to the other should be as collegial as indicated in the original project proposal. That is to say, in the program there should be a team approach with each member having an equal voice and an equal responsibility in matters of The Experiment. The team should not only be composed of all of the teachers and teacher aides; rather, it should be a more general educational team made of all personnel: teachers, teacher aides, administrators, evaluators, and consultants. In it, for instance, teachers should develop into a strong sharing community. Administrators should shed the role of authority and take on the role of active participants in the team together with others in the project.

In the Experiment at Butte from the start, teachers had developed a remarkable sense of community. Having participated in Project Homebound during the previous year they were well acquainted and familiar with each other as colleagues. They had a strong desire to share their experiences and participate in the new program together. Sharing materials and learning from special areas of expertise of their fellows were typical examples of their community, collegial spirit. Each person therefore served as a teacher to his colleagues. A feeling of learning together was fostered at the start.

During the year, various changes in the spirit of the teacher community took place. Many of the changes were positive ones in which the group became more cohesive. At other times, the teaching community became somewhat less integrated as when misunderstandings occurred. The following chapters describe these changes as they occurred; the presentation is thus an historical account of the Experiment at Butte. Certain recommendations, which appear in Chapter Five, deal with them. Important, however, was that at no time was the spirit of the teaching community really threatened in terms of wanting to serve and benefit students in the program. Interest in "doing what was always best for students" and "cohesiveness developed from teaching together the previous year" were reasons which teachers cited to explain this phenomenon. The teaching community of the experimental teachers appears to compare very favorably with the community of teachers in Tussman's own experimental program.

Although the teacher-to-teacher interaction was informal and ordinarily frequent, the teachers' involvements with their aides tended to decrease the amount of time teachers devoted to other teachers. For example, teachers were responsible to meet each morning in the office to plan lessons, discuss students, meet with other teachers, and so on. In some instances, they devoted the greater part of this hour-long morning period to assisting their aides with lesson plans, helping them to correct workbooks, and preparing them to use certain teaching techniques. The teacher aides were often required to handle their own lessons with students due to the small number of teachers and large student load. As a result, such preparation sessions were often essential and could therefore not be neglected. Teachers and teacher aides met their responsibilities in this in the interest of the students and because their contacts were pleasant, friendly, and very beneficial to teacher aides, but were made at some expense to the developing teacher community which depended on open lines of communication.

Because of the close association between teachers and teacher aides in each team, they developed a good working relationship with each other. Teacher aides seemed especially eager to assist their master teacher teammates. This resulted in their doing assigned work smoothly and willingly. Teachers expressed appreciation for this, although a few objected to "having to devote so much time to preparing the aides to teach competently." All teachers realized the necessity of having aides, saying that they "could never begin to handle teaching all of the students in their team, looking for good materials, and doing the clerical work necessary for getting these materials prepared for distribution to students."

Teachers, as mentioned, discussed among themselves whenever possible numerous topics pertaining to the project. Successful materials, good and bad lessons, and problems with particular students, among many others, were ordinary topics. With their teacher aides, individual teachers reported that similar kinds of conversations were very frequent. During these discussions, which strengthened the relationship among individual teams, teachers and teacher aides made continual and changing evaluations of the experimental part of the project. One teacher aide said:

> At the beginning of The Experiment, we were all completely confused about what we were supposed to be doing. My master teacher and I talked all of the time about it. We kind of confirmed each other's doubts and questions about it. We were so sure sometimes that The Experiment just wouldn't work. You know, I think that thinking this way prevented us from starting The Experiment or learning things about it to clear up our doubts.

Other teachers and teacher aides gave similar accounts. The program was constantly being defined and redefined through these conversations. Their importance was evident and positive in that, through them, teachers as a group and teachers and teacher aides had a chance to think about The Experiment, develop questions, and discover each others' attitudes as well. If brought to the consultants' attention, many problems or questions could be dealt with and often solved. They were also important because teachers and teacher aides acted toward The Experiment or other facets of the program according to the ways they defined them among themselves. Often, as is more completely described in Chapter Two under "Initial Misunderstandings," any especially negative misunderstandings were treated as real after having been defined and confirmed in these informal evaluation conversations. As a result, many teachers and aides did not, in fact, begin using reflective materials as soon as they might have. According to one teacher, "I guess I thought it (The Experiment) would be some strange, philosophical thing. We talked and decided that it just wouldn't be any good to try so, you know, I didn't even want to attempt to learn more about it or anything." At other times during The Experiment these informal evaluations worked in favor of the experimental goals and served to speed implementation of The Experiment. Within control group teams, misunderstandings or misconceptions were turned into facts through the same defining process. Allowing these to go unchecked or unchanged permitted some control group members to point out drawbacks in The Experiment which were objectively not there. For example, in an interview, one teacher mentioned that experimental students "were not being taught their basic or GED skills because of the teachers' concentrating all attention to experimental materials and reflection while neglecting the core ABE curriculum." Objectively, this was not the case, since reflective materials and discussions about these occupied only a small part of each experimental student's lesson. Other segments of lessons were devoted to teaching the core curriculum, such as grammar, math, or reading skills. Accounts of the contents of these conversations were invaluable for discerning reasons for certain events in the program and are included at appropriate times throughout this report.

Already discussed were the administrators' duties. While the project director served in a primarily supervisory, public relations, and liaison capacity, the program coordinator had the opportunity to work directly with teachers and teacher aides. The Experiment afforded the coordinator a chance to escape from traditional administrative models by advocating the team approach in which he was to become a part of the teacher community and work with it instead of supervise and remain apart from it. The coordinator's supervisory duties were required formally in coordinating the experimental and control parts of the program. He was to play a more supervisory role in directing the actual experimental group-control group design of The Experiment.

The experimental teacher-administrator relationship, ideally, was a "learning together" one, an extension of the team approach already elucidated. As humanities consultants indicated, an authoritarian approach to administration might squelch development of the experimental teams teaching community necessary for furthering the aims of The Experiment. It would create a gulf between the coordinator and instructional staff and would develop traditional lines of authority. Instead, the aims were best served when the administrators acted as guides instead of "bosses" or authorities. Teachers in The Experiment realized and appreciated this kind of leadership as necessary for keeping the spirit of The Experiment. One experimental teacher noted:

> The teachers and directors are on equal ground. We know and do not know the same things about what is supposed to be going on this year and have to discover things together. If I interpret Tussman correctly, he says, 'We're all equals in the program.' I think this is how we can learn more, think more freely, and be more willing to share.

Other teachers and aides, including some of those in the control group, felt similarly. They believed "even in Homebound a leader, not a real director, is best although Homebound might be more suitable to more direction than The Experiment." Other control group personnel felt that for their kind of instructional experience, "a more authoritative, traditional director was required, but not someone who goes so far as to tell a person what to teach." These suggestions and others are incorporated into the recommendations made for various parts of the program presented in Chapter Five.

Humanities consultants, the evaluator, and consultants to the evaluator remained somewhat outside of the closely-knit educational community in order to maintain a perspective helpful to making suggestions directly to teachers, teacher aides, and directors. They did, however, work closely with them and with each other in performing their tasks as described previously. Their changing relationship with the Butte project participants is charted in the following chapters.

Once a working relationship was established with teachers, teacher aides, and administrators, consultants, especially humanities consultants, saw themselves and were defined by the experimental educational personnel as "helpers," important resource persons to whom experimenters could go for advice or suggestions when the consultants traveled to Butte or to whom they could write if they wanted immediate suggestions, more materials, or other help. Humanities consultants included administrators in all preservice and inservice sessions and, thereby, acted as advisors or resource persons to them also in helping them develop or maintain paths toward implementing The Experiment. Humanities consultants provided the evaluator and evaluation consultants with similar kinds of assistance in discussing The Experiment, reflection, and various events occurring in Butte. Evaluators, in turn, informed humanities consultants of developments in the program. The preservice and inservice sessions and other meetings served as occasions for exchanges of ideas, not simply as times for consultants to "teach" the teachers. The spirit of exchange and learning together was evident at these times.

The Relationship between Teachers and Students

In terms of The Experiment and the whole program in general, perhaps the most important relationship to recognize and develop was the teacher-student or the teacher-aide student relationship. It was this relationship and qualities of it that were so distinctly specified among project aims. It was through this relationship that actual teaching and learning proceeded. Having developed during Project Homebound, there were certain striking characteristics of this relationship present in all teams.

Informality was the important keynote of this relationship, divorcing it entirely from the traditionally formal teacher-student relationship found in many large classroom situations. Both teacher and student felt a complete sense of freedom to behave in informal, relaxed ways during lessons. Freedom to discuss, question, or diverge from lesson topics was apparent. Both students and teachers felt that it was the teacher who set the stage for such relaxed learning, but that having lessons in the surroundings of a home particularly stimulated "home-like" behavior. Even in other educational settings, such as neighborhood centers or recreation buildings, informality was still emphasized in the teacher's attitude, placement of students in the room, arrangement of tables, and so on. A strong factor, in students' opinions and in the opinions of teachers, which additionally fostered the relaxed student-teacher relationship was that teachers and students interacted as "friends and not as if they were really students and teachers." Having their teachers as friends led students to feel less threatened in their lessons and more eager to want to engage in them and continue learning. Teachers, too, agreed that "in trying to come on as a friend and in striving to really be a warm person to students, the job of teaching became more enjoyable, exciting, and was done out of pleasure even during particularly busy days." The friendships allowed the teachers to discover important characteristics or problems of their students in ordinary encounters. Such information might have been closed to them if the interaction were carried on more formally. Teachers would have often lacked the personal knowledge about their students' lives that this year enabled them to solve numerous educational and other problems sometimes based in the students' family or work lives.

For both student and teacher, interacting as friends often developed into an intense care relationship in which each person went out of his way to please or to help the other. As a result, teachers engaged in performing various tasks for students beyond the scope of their teaching role. Registering them to vote, taking them to plays and other events, helping them to select groceries at the students' request, and visiting with them when no lessons were scheduled were among these. Teachers made themselves available to students on weekends, their "days off." These activities often developed into a "counseling function," which is described in Chapter Four. Because of caring about their teacher friends, students often worked more diligently on assignments, participated more in group discussions, prepared small gifts, and lavishly entertained at lessons to please the teacher. Students would often attend lessons they might be inclined to miss due to personal reasons because of their desire to avoid hurting their teacher. In initial interviews it was sometimes hard to elicit students' honest opinions of their materials, lessons, or teachers because of the student's attempts to "protect" their teachers or teachers' interests. Many students became highly sensitive to the teacher's attitudes and tended to like or dislike parts of lessons depending upon how they perceived the teacher's feelings about those same lessons. As shown in sections of this report which tell about introducing reflective materials, for example, acceptance or nonacceptance of experimental materials hinged importantly upon the teacher's attitudes toward those materials.

Adultness. Also part of the teacher-student friendship was a kind of mutual respect and admiration for each other's sort of knowledge, experiences, or other qualities. This served to help maintain the friendship and brought forth into the relationship the importance of the student's adultness. To students, "being treated as an adult, a whole, experienced, equal person," was a vital component of the enjoyment and willingness they found in participating in the Butte program. They complained of being treated in "childlike" ways in other kinds of adult education programs involving large, impersonal classroom instruction and a formally defined teacher-student relationship. Many believed this to be essentially "degrading and embarrassing" to them and were factors in their unwillingness to be a part of those kinds of situations. Recognizing this, teachers in both groups of the Experiment at Butte constantly attempted to make their students feel like adults continuing their learning. They avoided placing them into an inexperienced child's role.

According to teachers, doing this was "sometimes a conscious effort that had to be worked at, but was one that usually resulted in making the teaching job easier in the end and many times more rewarding." Drawing on a student's "adult life experiences" was often an excellent and easy tool for teachers to use in discussing, giving examples, or planning lessons. This adult experience served, too, to make The Experiment and experimental materials workable and enjoyable, as sections in Chapter Four indicate.

It is important to note that the aims for the experimental group of the project were designed to foster and build upon the importance of the student's adultness in delivering an ABE curriculum. In this, it was to build upon the principles learned during Project Homebound. It was intended that this be a product of stressing the equality and team learning spirit of all who were involved in The Experiment, including students. To foster a feeling on the part of both teachers and students that they were all fellow learners or all fellow teachers was an important aspect of this. The extent to which this successfully came about during the year is explained in Chapter Four together with other changes brought about by adding The Experiment to the Butte adult basic education program.

Summary of Interrelationships

It is apparent in the preceeding discussion that to further the aims of the Experiment at Butte all participants of the program, including administrators, teachers, teacher aides, the evaluator, consultants to the evaluator, humanities consultants, and students, were requested to and did in fact for the most part work to develop a strong team spirit in their interactions with one another, the teaching community. The teacher-student relationship was perhaps the most sensitive and special. Throughout this report, the changes and importance of these interrelationships are described whenever appropriate.

A General Description of Students in the Project

The characteristics of the experimental adult education program in Butte, often because of the well-known success of last year's Project Homebound, appealed to a very wide range of adult Butte residents who subsequently became students in the Experiment at Butte. As a result, the student population in the Experiment at Butte was highly varied using such criteria as age, sex, educational level and goals, place of birth, and area of residency in Butte. During the year, a total of 208 students enrolled in the program. Many more expressed an interest, but could not be accommodated due to the shortage of teachers, aides, and time. Of that total, 70 (33.6%) were men and 138 (66.4%) were women. Ages of students were diverse, ranging from 14 to 74. More specifically, 10 per cent of the students were under 19 years of age; 29 per cent were 20-29 years; 30 per cent were 30-39 years; 20 per cent were 40-49 years; 6 per cent were 50-59 years, and 5 per cent were 60 or older.

Students' educational levels, based upon the last year they completed in school, were the following:

EDUCATIONAL LEVEL OF STUDENTS

Table 1

Highest Grade Level Completed

	0	1	2	3	4	5	6	7	8	9	10	11	12 and over[17]
Percent	3.0	0	1.0	2.0	1.0	1.0	7.0	7.0	21.0	16.0	20.0	12.0	9.0

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[17] Most basic students who completed above a sixth grade level did so in foreign countries and were considered basic because of their need for basic English skills or citizenship training.

After assessing this and other information reported on each student's data sheet, students were divided into the basic, intermediate, and GED categories already described. Of the total number of students 79 (38%) were assigned to basic teams, and 129 (62%) were assigned to GED teams. When educational levels were determined by formal testing and other diagnostic measures used by teachers, the distribution of GED and basic was somewhat different. Of 208 students, 111 (53%) were at a GED level; 29 (14%) were at an intermediate level; 63 (30%) were at a basic level; and 5 (3%) were exclusively naturalization students.

Various cultural groups in the program added further to the diversity of the students served by the Experiment at Butte. The project attracted Butte natives, persons originally from other states, a number of foreign born people, and the members of various minority groups in Butte. Approximately 57 (27%) of the students were foreign born, coming to the United States from such countries as France, Germany, Mexico, Chile, Lebanon, Greece, Japan, and Korea. Twenty-seven per cent of the students considered themselves members of minority groups. Mexican-Americans and Spanish-Americans comprised 12 per cent, American Indians 6 per cent, Orientals 7 per cent, Negroes 1 per cent, and others 1 per cent.

Students were drawn from neighborhoods in numerous areas of Butte. Specifically 122 (59%) lived in Model Neighborhood areas while 86 (41%) lived outside of these areas.

The students represented both employed and unemployed individuals in Butte. Many employed students worked as miners, truck drivers in the open pit, as clerks in stores, janitors, mechanics, shop owners, and waitresses. Some students, who were highly educated in other countries and who made use of the program to learn English or to become naturalized citizens of the United States, represented other white-collar jobs. Other students were seeking employment, were retired, or were housewives with no immediate job plans. Again, the variety of students reached by the Experiment at Butte, was great.

Students' goals and educational interests provided a further basis on which to distinguish and categorize them. Teachers routinely used these in their own considerations of students and in deciding ways to cope with them in their instructional encounters.

GED and a few basic students as a group shared at least one goal in common: the eventual attainment of their GED high school equivalency certificate. As such, their educational interests normally included learning the math, English, reading, and other skills necessary to pass the GED examinations administered at intervals throughout the year. Government was a popular topic, although it did not distinctly appear on the examination. Many students who were highly GED-oriented often stated a desire to go as quickly through their studies as possible in order to get the GED certification immediately. Among this group were those individuals who later planned to enter other educational programs, such as vocational-technical training, or who had immediate plans for seeking employment. Other GED students, on the other hand, did not set such a short limit on the time they spent toward getting their GED certification. Instead of placing a high premium on having the GED certificate itself these students seemed to feel that the information and experiences gained while studying were more important than the certificate itself. They therefore wanted a more relaxed, slower course of study. Their range of educational interests centered about the same exam topics as the other GED students, but the less goal-oriented students appeared to want a "broader" education as well and diversions from ordinary course work. These GED students felt, as one woman put it:

> I'd be missing a real education if I just did work for the test. The test has lots of important things on it, skills and information like that, but I won't really feel educated unless I can get, well, a liberal education. Really, this is my last chance to get it.

They seemed unsatisfied, therefore, if all instructional efforts were directed toward passing the test.

Basic students in the program all had specific goals as did the GED students. They wanted to improve their math, grammar, writing, or reading skills primarily. Most of the non-English speaking students were learning to read, write, and speak English for the first time. Some students needed to know even more basic things. They wanted to learn to read simple signs, newspapers, mail, labels on cans, recipes, telephone books; they wanted to learn how to use various community facilities, including banks or libraries. Many wanted to get drivers' licenses. There were some students who directed their efforts toward meeting naturalization requirements. Often, basic students had set the GED examination as an ultimate, eventual goal.

Most basic students did not limit their educational interests to one or few goals. Instead, they said they wanted to "learn as much as possible as long as they were attending lessons." Most shared the less goal-oriented GED students' desires to become as broadly educated as possible instead of learning only the skills which prompted them to enter the program. While saying this, many admitted that this would enable them to consider themselves "truly educated people." Because of this desire, their interests were very wide, ranging from basic skills which they considered vital to learning about government, art, other cultures, literature, nutrition, city resources, other geographic areas of the world, and current events. Each had preferences within these lists of interests which pertained to their particular styles of life as they saw them. For example, foreign language speakers chose literature about their countries of origin quite often; people involved in the low income group enjoyed selections which would help them cope with problems they might encounter in connection with that group. Teachers in the program had then to develop lessons which would meet the students' basic goals, but which would incorporate also many of their interests in ways that students would accept and enjoy. A further discussion of this process is presented in this chapter in a section labeled "Teachers' Routines."

Students' reasons for participating in an adult education program were all quite similar. Three reasons were generally cited for returning to school. Many participated because of their plans to seek new employment or job promotions. They needed to become either more skilled in the basic curriculum or to achieve the high school equivalency. Without the necessary skills or certifications they felt "stuck." Some of these same job-seeking students and others who had no special vocational plans also stated that they chose to participate because they wanted to improve and satisfy themselves personally by becoming educated. They defined education as a primary way to obtain their self-improvement. Being undereducated made them feel that they lacked confidence, another important facet of being stuck, unable to change one's future. They felt that adult basic education would add to their self-confidence because they would have specific skills, a wider range of knowledge, and the proof for themselves that they could accomplish successfully such a task. They believed that having a better educational background would increase their prestige in relation to others in the community since many admitted that they felt "a little less than equal for not knowing how to do certain things" when dealing with others. Foreign born persons lacked confidence because they did not know how to speak English well, even though they were often well-educated in their own countries. Thirdly, students entered the Butte program and wanted to improve themselves because of their children. Apparently, students who were parents of school children felt embarrassed and uncomfortable at not being able to help their children with homework assignments. This prompted their participation in the program. Additionally, they wanted to set a better educational example for their children. Many believed that if ever their children were to think of dropping out of school they would have no argument to prevent it. They themselves had often done the same thing as teenagers. Showing how much they now cared about education and how difficult an education was to obtain after quitting, they believed, would be an excellent lesson for possibly unmotivated children.

As discussed, most of the adult students' reasons for participating in the Experiment at Butte were definite and strong ones. Students felt a sense of urgency in them. As a result, they participated avidly in the program and attempted, at their own speeds and in their own ways, to reach their goals. According to some of the teachers, those students who failed to participate upon being enrolled often seemed to lack the sense of urgency in their reasons for joining the program. These and other reasons for dropping out of the program at the beginning are discussed in the section labeled "Dropouts" in Chapter Three.

Other characteristics of students. There were other characteristics of students which, together with the other traits and features mentioned, influenced students' participation and goal attainment somewhat. Among these influential traits were their learning abilities, previous experiences with the traditional middle class school system or other adult education programs, and particular personal problems. According to teachers, those things, if problematic, sometimes surpassed the other influencing factors in importance since students "had a difficult time studying and learning with problems like them on their minds and although students did not take I. Q. tests as a part of this program, a teacher was able to tell to a certain extent whether her student was a particularly slow learner if other factors seemed okay." In these matters, students had to be considered individually, of course, but teachers were able to categorize certain students in terms of these last kinds of personal qualities.

Teachers informally categorized their students according to learning abilities during the several months devoted to teaching them and comparing them to other students. They identified students as "unteachables," "slow learners," "average students," and "fast learners." They felt frustrated dealing with people they deemed unteachable, people with whom they were able to achieve very little or no progress throughout the year. They felt unqualified to teach exceptionally slow learners and realized that with special teaching skills they might be able to help them learn.

Some teachers had a degree of success with these students, but felt a special education teacher would be able to do more. Average students were, according to teachers, the most common in the program. They said they felt that fast learners were the next most ordinarily encountered. Teachers enjoyed working with both the average and fast learners, but were especially challenged and gratified in dealing with faster students. They also felt more qualified to teach these latter two groups. Interestingly, students' views of their own learning abilities paralleled these teachers' views in informally judging their accomplishments.

Students who experienced problems in interpersonal relationships, in their home situations, with families, or in other areas of their personal lives were naturally classified by teachers as "surviving students." Regardless of their motivations or goals, teachers believed, their other problems prevented them from performing their studying and learning as they might have done otherwise. For example, one teacher stated:

> This type of student is one who is just barely 'getting by' because of problems such as no money for rent or food, trouble with kids, a recent divorce, and other frustrations. The person wants to learn and has good reasons for doing so, but just can't get away adequately from other problems. They stay in, but barely.

Teachers found challenge in dealing with these kinds of students and often discovered themselves serving as counselors to them as is described in the section of this report which deals with counseling.

"Turned off" students were another type of adult ordinarily described by teachers. These were usually adults who had had difficult experiences in the conventional middle class-oriented school system and had either dropped out or were forced to leave that system. Many had been away from the educational system a long time. This and their negative feelings about school and the educational system in general helped to make their learning more difficult. These students challenged teachers because teachers had to discover ways of helping them to like and participate in getting an education again. That they had joined the program voluntarily was a beginning, but they often retained their skepticism about the educational system. This category included some basic and GED students, who eventually intended to attain their high school equivalency. No foreign born or foreign educated students were found to fit into it, however.

In this section, the divergent, but important, characteristics of students were discussed in order to point out the wide range in kinds of adults who were served by the Experiment at Butte and to present the various student idiosyncracies with which teachers dealt in their daily instructional encounters when introducing both core and reflective materials. Examples of their ways of coping with these student traits are covered in a following section called "Teachers Routines."

In the next section, various instructional settings are described to illustrate the conditions under which instruction proceeded in the Experiment at Butte.

The Home as an Educational Setting

In the Experiment at Butte individual tutorial and group instructions took place, for the most part, in a home context. The physical and social atmosphere of these homes provided an interesting and unique backdrop for the developing interaction between students or between students and their teachers or teacher aides. This backdrop influenced the teaching and learning that occurred in numerous ways. In this section some of the properties of this kind of educational setting were necessarily described in order to illustrate their impact on the social organization of the Experiment at Butte and the achievement of its experimental aims.

Benefits of teaching and learning in the home.

The benefits for carrying education to the homes of adult students were numerous. As established during Project Homebound the previous year, there were many adults, especially those with small children at home, who were actually unable to leave their homes in order to attend other adult education classes held during days or evenings at centralized locations, such as the vocational-technical center. Their inabilities to leave, however, did not stifle their interest in getting an education. When education was offered to them in their own homes and at times fitting their own convenience many homebound adults became avid participants in learning. Taking education to students' homes therefore eliminated practical problems shared by many adults which might ordinarily stop them from joining other kinds of adult education programs. Transportation problems ceased to be a factor in their participating. Home lessons catered to adults with parental responsibilities who would have the additional expense and inconvenience of hiring or finding adequate baby sitters if they were required to leave their homes to attend a formal class session. Education brought into homes reached some of the physically disabled, blind, or deaf persons in Butte who would not have joined a program otherwise. Many working adults whose free hours for lessons were subject to constant change depending on their assigned shift schedules, found that they were able to shift their lesson hours whenever necessary to adjust to new working hours. Since many had to schedule instruction directly before work or before going to bed, having their teacher come into their homes provided an added convenience for them and eliminated the time they might have spent in transit to and from lessons.

Besides these benefits for adults unable to leave their homes, the atmosphere of some of the homes provided a potentially relaxing "at home" educational setting for tutorials and lessons even when students were grouped together in their own, another student's, or the teacher's home. Teachers and students alike felt that this "at home" informality extended itself to their individual or group lessons. It helped to stimulate informality in their interactions with one another. As one student aptly added, "The relaxed surroundings of a home are catching. Conversations before and during lessons take on the same kind of comfort and informality." In terms of physical surroundings in a home, students and teachers noted a lack of formal classroom stiffness. They described the placement of teachers and students in chairs in a living room or around a table in a kitchen or dining room as being much more conducive to informality and relaxed learning than the stiff arrangement of desks in rows in traditional classrooms. During home lessons, participants drank coffee and tea or smoked if they wanted to do so. This added to the comfort and desirability of home educational settings and afforded still another way to foster an easy informal atmosphere. Students in their homes dressed as they wished. They were not bound or burdened by dress regulations and did not have to take time from meeting other responsibilities to "dress up" for their lessons. For working people or mothers with children to care for this was a special advantage.

A particularly important benefit of meeting students initially in their own homes was that lessons seemed less threatening or embarrassing to them on their "own ground." Many adults who had been away from school for many years or whose lack of basic skills made them self-conscious in front of others refused to attend lessons in large classrooms with many other students. They felt uncomfortable and embarrassed at showing to others their need for schooling or their skill deficiencies. Some foreign born students, for example, reported that they felt ashamed and uncomfortable in large groups of English speaking people where they had to demonstrate their language skills. Other adults were ashamed to admit to their neighbors or friends that they were learning basic skills. Initial private tutorials in their homes helped to make them more confident in their learning abilities. Grouping them after this with a few other students in their homes or others' homes, or at informal centers. rather than in classrooms, still made them feel they were, according to one teacher, "on familiar territory."

In terms of experimental aims where informality and friendliness in teachers' and students' interactions were paramount, the qualities of homes as educational settings, which were enumerated in this section, were distinct assets. The relaxing, convenient, and informal atmosphere encouraged students to relax during lessons. It helped, as teachers suggested, to break down notions of conventional teacher and student roles and was an atmosphere that fostered the development of the teacher's role as helper or guide to the student, the sixth experimental aim listed at the start of this chapter. They noted also, that lessons in homes often became relaxed and eagerly anticipated social events for students and further developed the teacher-as-friend relationship. This, many teachers and students stated, "helped to ease tension by making students feel that they were not under pressure or the focus of attention in the lesson." The teachers' visits became important social events in themselves and not just educational events. Teachers and students agreed strongly that learning was easier to them when they were relaxed. They were inclined to help each other, rather than compete against each other, in these informal home lessons with friends. Home learning settings, with the properties listed above, therefore were conducive to achieving experimental goals, such as the second and third aims listed before. As a student suggested, "A comfortable home is at least a starting point which sets the mood for the rest of the lesson."

Not all homes, however, shared the comfortable, informal qualities so conducive to relaxed teaching and learning, fostering friendships among lesson participants, and achieving experiment aims. Certain homes in which teachers taught had other disadvantages which seemed to diminish the effectiveness of a home environment in teaching and learning.

Disadvantages and particular problems. Aside from the many points that were strongly in favor of using some home settings for conducting lessons and tutorials, there were certain disadvantages in other homes that made them much less suitable for instructional settings. Noises of all kinds and distractions during lessons were among the specific problems encountered in these homes. Phone calls and visits from friends frequently interrupted lessons, making it difficult for teachers or students to concentrate on their subject matter or discussions. The presence of other family members who listened to radios, watched television, or talked in nearby rooms distracted the students even more. They were constantly aware of events going on around them and sometimes became nervous, frustrated, or unable to resist joining in the conversations with the distracting people. Children, too, drew their parents' attention away from their studies by talking to their parents throughout the lesson, playing noisily nearby, or by trying to distract the teacher in various ways. Teachers, like students, were bothered to some extent by any of these kinds of factors. All broke the continuity of otherwise pleasant encounters. The tensions they produced lessened the relaxing atmosphere typical of other, more quiet homes.

Much time, according to several teachers and students, was devoted to coping with these distractions or trying to ignore them. "Sometimes," said one man, "I concentrate so hard on not hearing my wife and kids in the kitchen that I forget all about what I'm supposed to be doing out here." Other students and teachers made similar comments. In some students' homes particular kinds of distractions, especially children's interruptions, were so usual, that teachers and students routinely provided for them before the instruction began. Teachers, for instance, came to some lessons armed with extra tablets and colorful pencils for children who "joined in" the session. Others set aside some of the lesson time to pay attention to family members or children by examining their school work and drawings or meeting their friends. A very few other teachers and students were able to continue interacting while seeming to completely ignore noise and other distractions no matter what kind, although this was not the usual situation.

Besides social distractions, such as the ones cited above, there were other problems because of poor physical facilities common to many homes. Teachers considered some homes very uncomfortable. Some in winter were extremely cold. Teachers and students were forced to keep coats on during the lessons. Other homes had poor lighting which made reading or writing difficult. Teachers thought that they were more conscious of this than their students who lived in those homes and were therefore used to the physical conditions. Other homes had size limitations and only a few chairs, which made them unsuitable for even small group lessons. Most homes, of course, had no large blackboards, which would have been useful for explaining math problems to groups of students. Some teachers carried small, portable blackboards with them for these purposes, but some felt that these were inadequate, especially for GED lessons.

Some homes, then, which were used for teaching and learning purposes, had numerous drawbacks. Although they did not disturb some teachers or students, many others found some of these situations uncomfortable and unpleasant for learning. Some students realized that they were completely unable to learn in their own homes and went, instead, to other students' homes or to one of the neighborhood instruction centers. Similarly, in cases where physical facilities or distractions were significant problems, teachers encouraged students to meet at other locations. However, if this was not possible, they still continued to teach in those homes. The advantages and disadvantages of homes as educational settings were varied and numerous. They provided an important backdrop for student-teacher interaction at lessons held in homes. As such, the peculiar educational context of homes was a factor influencing the continuity and intensity of lesson interaction and the achievement of experiment aims which were pointed out in this discussion. Homes which were adequately comfortable, quiet, and relaxed were conducive to teaching and learning informally and were enjoyable contexts for teachers and students alike. On the other hand, teachers and a number of students interviewed felt that homes with especially poor physical facilities or many distractions were not conducive to learning or teaching, and efforts were made whenever possible to schedule these students' lessons in other homes or at neighborhood centers. All students and teachers concluded, however, that instruction should begin with individual tutorials in new students' homes until they became more confident in their learning abilities and could be brought into a small, nonthreatening learning group in their own homes, if suitable, or in nearby homes or centers.

Insights into the formal classroom situation. From the experiences of teachers and students in Project Homebound and The Experiment at Butte, lessons in home settings and the friendly relationships developed among teachers and students in them provided several insights into the problems of the normal classroom situation and speculations about alleviating them. Specifically, home settings shed light upon three areas of concern:

classroom formality, discipline problems, and absenteeism. Teachers and students in the Experiment at Butte believed that informality of a learning context and the relaxed interaction in it were quite beneficial to students' learning. Students no longer felt pressured, directed, or "on the spot." They felt relaxed and congenial instead and enjoyed learning. Many of these same students in the program originally had quit school as teenagers because of their dislike for formal, rigid classrooms in which they felt constantly ill at ease and under pressure. They felt a need for informality and a relaxed learning environment, which the Experiment at Butte and Project Homebound met. It follows that ordinary classrooms in primary and secondary schools might be benefitted if they were to become less rigid and more informal by incorporating as many "at home" qualities as possible. To achieve this, coffee, milk, or soft drinks might be available throughout the day, for example. Teachers might allow students to take breaks in lessons in order to chat informally, walk around, go to the bathroom without permission, or get coffee. Chairs and desks could be rearranged to foster informality. Finally, teachers might work to break down at least some of the traditional notions about teacher-student roles in an attempt to develop friendships and informal relationships with students as teachers in The Experiment have done. Making these and other changes to informality might help to make school more acceptable to potential dropouts.

Secondly, teachers in the Experiment at Butte found no discipline problems with their adult students, whereas primary and secondary school teachers are sometimes plagued with such difficulties. Teachers and students in The Experiment who were asked about this said that informality in a lesson, which afforded relaxed learning and much self-expression on the part of students, was a factor in the absence of discipline problems. Additionally it encouraged students to "like" what they were doing. They felt that there were other important factors as well. Because students were adults, teachers respected their knowledge gained through living their everyday lives. They were treated on equal bases. Also, instructions were usually given in students' homes, the students' own teritories, to which teachers were invited. The rules and regulations governing interaction in homes were not those contrived by teachers but were, instead, informal rules students made for their own surroundings and were mutually agreed upon by both teachers and students who carried on lessons in those surroundings. Students followed their own home rules which they accepted as usual and normal. They had no reasons for breaking these rules since they had naturally developed them. Perhaps teachers and school administrators in other situations might cope better with lack of discipline if they would try to more closely approximate these home circumstances where there is no need for discipline. Recognizing that teachers and students are fellow learners, allowing students to help develop standards and rules for classroom participation which they mutually agree upon, and working to help them enjoy education experiences are examples of tactics that might be tried. School might become their "own ground," as Butte adults' homes are their own ground.

Finally, many teachers in the Experiment at Butte developed ways to help students avoid missing classes. Of course, many students missed lessons because of illness, severe family problems, work, or for other similar reasons. Nevertheless teachers felt that they helped to reduce absenteeism for at least some students by again integrating their students into the program. They involved them in organizing lessons, selecting topics of interest, and informing them of the program, its aims, and some of its problems. Students in the Experiment at Butte believed that they were important and highly involved parts in the program. They cared about it and their teachers and felt responsible for it. If high school students believed, for example, that they were very much a part of the high school or, even, of the educational system, instead of feeling apart from it, their enjoyment and participation might well be increased. They might become very much like many of the students in the Experiment at Butte who were happy in being involved and came to care about learning and their teachers' feelings as friends. Being responsible for the program in Butte, students strove, therefore, to avoid being absent and to meet their requirements.

In this section certain characteristics and interrelationships which were evident in the home as an educational setting were presented. Lastly, their applicability to more traditional teaching situations was illustrated. Teachers and, especially, students themselves suggested these possibilities. Students who were disenchanted with the traditional school system thought that they might not have dropped out of or disliked school as much if ordinary classes were more like their home lessons.

Other educational settings. As noted previously, not all lessons were held in students' or teachers' homes. Teachers used a few other settings as well. With much success, they incorporated in these lessons as many of the "at home" characteristics as possible. Some teachers, but not all, handled larger groups in somewhat more formal ways. In general, group lessons outside of homes were held at five centers throughout Butte: the Neighborhood Center, Y. M. C. A., Silver Bow Homes Recreation Center (a low-income housing project), Aldersgate Methodist Church hall, and at the Indian Alliance Center. Usually, teachers taught groups of about ten students at each of the centers. Meetings were scheduled weekly, twice weekly, or in some cases, three times per week during the days or evenings. Only people who were regularly free at class times were included. For the most part, GED students participated at these meetings. Some basic students did meet out of their homes if they were assured that their close, caring relationship with their teachers would not be jeopardized. In addition to giving group instructions to these students, teachers tutored some of them individually at the students' request. At most of the lessons at centers, students still continued to feel that the teachers' visits were important events in themselves. They found them important to attend for friendly socializing reasons and the usual educational reasons.

This section has dealt with the various educational settings in which developing interactions between teachers and students occurred. The characteristics and influences of the home setting were explored to provide a clear picture of the "backdrop" for the social organization of the Experiment at Butte.

The following section presents another account of the project social organization as it is revealed in teachers' routines.

Teachers' Routines

Teachers and teacher aides in the Experiment at Butte fulfilled demanding and busy daily schedules which were marked by a variety of ordinary encounters. Teachers' need for versatility was apparent in meeting these demands.

Teachers and teacher aides met Monday through Friday at 9:00 a.m. in a room in Butte's old Central High School building, which they called "the office." This room served as headquarters for the Experiment at Butte throughout the year. At the office during this meeting hour, teachers and teacher aides normally discussed students, checked lesson plans, compiled new materials, and chatted informally with other teachers, teacher aides, or the coordinator. Announcements pertaining to extra meetings or other project events were made at this time. Following this hour most teachers and aides left to meet with students. They were, however, required to devote two other hours daily to office work, such as making new lesson plans, reviewing materials, filling out time sheets that indicated the amount of time spent with each student, doing clerical work, or correcting students' assignments. Teachers fit these additional office hours into their week's teaching schedules wherever possible and were therefore not at the office at the same times each day or each week.

On several occasions in the year during the 9:00-10:00 hour, the coordinator scheduled staff meetings with all project personnel to discuss problems, answer questions, or make important announcements. For experimental teachers and teacher aides, the humanities consultants provided inservice training meetings a number of times during the year. These lasted two to three hours during the morning depending upon teachers' schedules. Experimental teachers, teacher aides, and the coordinator of the program spent at least one hour in the morning often during the regular 9:00-10:00 meeting time, at an "experimental meeting." At these, teachers discussed new humanities materials, successes and problems with other materials, and their progress in trying the experimental approach. The evaluator attended most of these meetings during visits to Butte and informally interviewed experimental personnel as a group about experimental matters. Teachers also discussed plans for further developing the experimental part of the program and topics appropriate to bring up at inservice training sessions with consultants at these experimental meetings.

At least three regular working hours per day for teachers and teacher aides were office hours and meeting hours. Teachers and teacher aides spent the rest of their days and evenings in various kinds of meetings with students: group lessons, tutorials, social visits, or other meetings. They met with each student at least two hours each week and often longer. Regular lessons, such as group meetings or individual instructions, which were held in homes or at one of the neighborhood centers, lasted usually for two hours--or longer if students and teachers felt it necessary and could work it into their schedules. GED classes held at the centers met two and three times per week. Some students who met in groups requested an additional hour each week for tutoring on a particular subject. Teachers sometimes met with individual students or small groups of students in homes one and a half hours two times each week at the students' request. Teachers' routines changed weekly depending upon their students.

Some teachers in the program from both experimental and control groups provided other educational and social opportunities for their students. For example, one teacher, who taught a number of Oriental students learning to read, write, and speak English, held an "English Club" in her own home one evening each week. For students with no transportation, she arranged rides with other students or with her teacher aides. At that club, students learned about English literature in various forms, watched movies, and chatted in English for practice. Students treated their club as an anticipated social occasion. Their teacher served a dessert accompanied by coffee or tea at the close of each session. As a group they learned about and celebrated traditional American holidays, such as Thanksgiving or Valentine's Day. At times throughout the year, some of the other club members volunteered to hostess the meeting in their own homes. Another teacher devoted Friday afternoons to showing movies to senior citizens at the Y. M. C. A. to which her students were also invited. Occasionally, students all met in her home for a regular lesson. Other teachers did similar kinds of things for their students. Teacher aides were especially helpful at assisting at these.

Since teachers traveled to homes, neighborhood centers, and the office numerous times every day, they spent much time in their cars driving from one location to another, often leaving themselves little free time between lessons for meals or for engaging in other activities. Often they transported students to centers or homes for group meetings and drove them home again. Teachers still made time available to help any student at the student's request at times not regularly scheduled. They were often "on call" even on weekends, although regular meetings generally were not scheduled on those days.

As indicated, teachers' days were busy and demanding. Routines varied from day to day as did the types of encounters they had with students. About these encounters, including group lessons, tutorials, or other meetings, teachers and their aides suggested several interesting notions which gave an insight into the nature of the encounters themselves.

Temporary encounters. In the Experiment at Butte teachers met, as described, from one to several times every week with their students. At the very least, then, they met for scheduled instruction four or five times per month from the start of the teaching phase of the program during the first week in October until the middle or end of June when the program ended. Classes were sometimes cancelled due to students' illness or other reasons, which decreased even more the number of hours of teaching each student received. The adults therefore received many fewer hours of instruction than school children learning similar kinds of skills in the school system. Yet, the adults set high goals for themselves, acting as if they were taught the same number of days and hours as the school children. Together with the problem of too few meeting times, the program's temporary one-year nature was a second facet of what teachers called "temporary encounters." Teachers' and students' routines were filled with these temporary encounters made up of tutorials and lessons and other meetings. Temporariness of events in the program affected teachers and students alike. To get as much as possible done in a short time was a common concern. Not knowing if they would receive instruction the following year made them rush through topics and omit things in favor of others judged more vital or practical to know. At lessons, especially at the end of the year, there was a constant note of uncertainty as to what to do since neither teachers nor students knew whether they would have the opportunity to meet or not after the summer. Even students, who wished to be in the program over a several-year period to take their time learning and becoming adept at what they learned, felt a continual need to rush and accomplish things quickly. Nontest-oriented GED students, for example, developed a sense of urgency in completing their studies to take the test since they were afraid they might not have another similar chance for instruction. Pressure on teachers was great in view of these factors, especially if they were trying to add reflective materials to their students' ordinary lessons. That this had to be done artfully and carefully is indicated in the discussions of reflective materials in the chapters which follow.

Because of the temporariness of the project, teachers sometimes resorted to teaching "small tasks" to students which they believed the students needed to know. This was especially true in the lessons of some very basic students where small tasks included reading clocks, making a grocery list, using the phone book, addressing letters, or others. The sense of urgency to accomplish these things often made teachers present these small tasks in segments of necessary information rather than incorporate them as parts of general blocks of ABE curriculums, such as reading or writing or grammar.

Together with teaching small tasks were the teachers' attempts to teach a student as much as he could possibly grasp in a single lesson. Some teachers referred to this phenomenon as "filling up" the student. They agreed that doing it decreased the relaxation and enjoyment they especially wanted to integrate into lessons. Because of this, they consciously tried to avoid efforts to "fill up" students even though the temporariness of the program fostered the filling up phenomenon. Adding reflective materials and discussing them helped to get away from trying to fill up students, and if done artfully, made teachers and students forget for a time about the temporary nature of the Experiment at Butte.

Teachers' routines and students' curriculums were therefore influenced by their awareness of the temporary aspects of a one-year program. It led many times to teaching and learning small tasks only and to the teachers' working to fill up students at lessons. If allowed to occur, these aspects distracted from experimental aims in the case of experimental teachers and students in that they forced the teacher to assume a more traditional teacher role, decreased the informality of the session, and put students under greater pressure to become filled up. Teachers, however, worked to dispel notions of temporariness in their interactions with students. They consciously avoided filling up students and tried to incorporate small tasks into other work instead of focusing on small tasks alone. They used relaxed discussions in presenting materials. As a result, they decreased the influence that temporariness might have had otherwise. It was nevertheless an important factor in the program.

Teachers' routines included these efforts to combat temporariness and others directed importantly to dealing with students' individual characteristics and preferences and goals. These next elements of teachers' routines are discussed in the following section.

Teacher "bits." The kinds of adults who were students in the Experiment at Butte were discussed previously in this report. A wide variety of students participated. Each had his own goals, interests, and, of course, particular personality traits. Small group or singular instructions made it possible for teachers to become familiar with their students' idiosyncracies. They were therefore able to individualize or personalize lessons in many ways to satisfy each student. To accomplish this, they developed what some teachers called teacher "bits," ways of adapting themselves and their teaching techniques to suit particular kinds of students encountered in their teaching.

Teachers performed their "bits" at various stages of lessons: arriving at a student's home, starting the lesson, coping with distractions, introducing materials, building a student's confidence, and others. In using "bits," teachers did not pretend to be anyone other than themselves, but tried to adjust their styles in ways that would help them cope with each kind of situation.

Before coming to a student's lesson, for example, teachers sometimes had to call the student to announce their arrival or to make sure the student remembered the appointment time. Various tactics were a part of greeting students once teachers arrived at homes or instruction centers. To effect "at ease entries" and to relax students before lessons teachers devoted a small portion of time to chatting about topics not related to lessons, counseling students if such questions were asked, and visiting with other family members who would otherwise interrupt lessons. Other students, however, preferred to dispense with long greetings and wanted to "get to work" with little delay. Other students who wanted to prolong the initial chats were more difficult to direct to their studies. Teachers found ways of gently leading them to do the lesson of the day while teasing and joking with them.

During lessons, teachers found some students to be more independent than others. In presenting new materials they gave these students much freedom to discover information and ideas for themselves, which this kind of student preferred. Teachers adjusted their methods to being somewhat more directive and highly encouraging to less independent adults, but if participating in the experimental group, continued to de-emphasize their teacher roles in favor of being fellow learners. For satisfying some very GED test-oriented students, teachers had to keep the test in mind and refer to it in presenting topics. All new topics, for instance, had to be related to the test in order for some students to treat them as worthwhile. For other students new materials were preceded by reviews of past learning. Topics for slower students were introduced carefully and patiently. Teachers often reviewed a lesson for them many times. For faster students, movement from lesson to lesson was easy. Teachers throughout the year designed special ways and times to introduce specifically reflective materials to make them as effective, enjoyable, and as useful as possible. This is described in a section in Chapter Three entitled, "Adding Reflective Materials."

Students' educational interests and topic preferences entered into selecting certain materials used by teachers to introduce material in block areas of the ABE curriculum. Teachers from the experimental and control groups found it useful to let students help them select the kinds of materials they preferred to use in learning ABE skills. Neither group of teachers let the students select the content of the adult basic education curriculum the teachers adapted for each student, but the students did avidly participate in selecting the vehicles for its delivery, such as picking the topics of kinds of literature studied, deciding to use movies and other visual aids to illustrate certain concepts, using reflective materials for grammar study in conjunction with work books, and so on. Teachers in the program generally met this experimental aim (number seven as listed at the start of this chapter) and worked toward it when they discovered the benefits of their students' involvement. Experimental teachers especially directed their attempts to this aim. They let students pick the topics they wanted to discuss and designed or selected materials to fit these interests.

During all lessons, teachers' "bits" involved relating the ABE curriculum to the students' personal concerns. By rationalizing its importance to them in their everyday lives and in letting them select vehicles for learning, teachers accomplished this.

Teachers had to be skilled at scheduling breaks in lessons or switching from one topic to another to insure a relaxed learning atmosphere. Again, their tactics were designed to satisfy the needs of each kind of student. Whereas some students disliked any real breaks in the lesson and were satisfied with the relaxed and informal nature of their lessons, other students with shorter tension spans seemed to need many breaks in their lessons and a variety of subjects incorporated into a single lesson.

Many students enjoyed diversions from lesson topics. Teachers found ways of handling diversions to develop their friendly interactions with students, to interject practical learning, or to simply break lesson tensions. They identified two kinds of diversions based upon their relations to lessons: irrelevant and relevant. Irrelevant diversions were those in which teachers and students chatted about topics not related or useful to the students' lessons. These diversions took on the character of breaks in, rather than parts of, lessons. They served to lessen tension and develop friendships among students and between students and teachers. They also provided times to discuss topics of practical concern to students. For example, students asked teachers' advice about problems with children, their household budgets, places to buy items they needed, forms they had to fill out, among many others. Much of the teachers' counseling was done during this type of diversion. Relevant diversions were those in which topics related to the lesson were interjected to add depth to lessons. Relevant diversions were also times when teachers could easily add reflective materials or interject ideas for reflective consideration. Both teachers and students could suggest diversions. As one teacher mentioned, "We do it whenever we feel that by doing so we would increase the enjoyment, relaxation, or usefulness of the lesson."

These and other teacher "bits" were, because of the idiosyncracies of the wide variety of students, believed to be essential ways of coping with kinds of students and types of lessons. Teachers found it necessary to set a mood for a lesson by employing their various techniques, some of which were discussed in this section. Their "bits" were important in developing an experimental, reflective spirit.

Good lessons and bad. Teachers and students each evaluated their mutual lessons informally and regularly. Their criteria for good and bad encounters are highly similar in that they routinely judged the same parts of their encounters. Their evaluations of the same lessons were not always in agreement, however, because of very subjective factors in judging one's own performance.

Teachers and students in their evaluations of lessons both used the success of teacher "bits," ways of coping and interacting with students, as one criterion. They paid attention to how much was accomplished during the lessons and their definitions as to how they affected the other person at the lesson. It was in these last two areas, which indicated a "feeling" about the lesson, that teachers and students sometimes differed. Though the teacher thought a student did well in a lesson and met all expectations, the student sometimes felt he should have done better, for example. Experimental teachers judged lessons, too, in terms of living up to experiment aims.

A typically good lesson was described quite often, therefore, as "one in which the teacher made learning easy, fun, and relaxing for the student and avoided putting the student on the spot." It was one in which the teacher and student worked at a mutually comfortable speed and accomplished the outlined lesson for the day. If a teacher said at the beginning of a lesson, for instance, that the lesson would cover a certain spelling exercise, math problems, and a reading from the reflective material selections, neither the teacher nor student felt satisfied unless all were accomplished. Diversions at a good lesson led to satisfying conversations and sometimes resulted in solving a practical, everyday problem for the student. Then, the interaction was not only useful because the student learned skills or developed his reflective abilities but because the teacher gave some real and personal help to the student-as-friend. After a good lesson, both teacher and student felt good about the way each did during the lesson in discussing, presenting, or handling skills, or in interacting with the others at the lesson. A sense of developing a good, friendly relationship and being an asset to the lesson were important to its being judged as a good lesson. Though they very often agreed, teachers did not always have the same feelings about their own performances as the students did. Sometimes a student's evaluation of himself was not the same as the teacher's evaluation of that student. Both teachers and students seemed to judge themselves more severely. These subjective evaluations of performance played a slightly more important role in judging a lesson as good or bad compared to other factors.

Experimental teachers judged their lessons additionally according to how close they came to meeting experiment aims. Lessons were good if they were leaders, not just teachers, if they learned with their students; and if they handled reflective discussions well to further develop their students' reflective abilities. Experimental students came to share these judgments once they discovered the nature of The Experiment.

Lesson participants defined bad lessons as those in which materials for the lesson were not completed and in which teachers and students had difficulty interacting and were ill at ease or on the spot. They came away feeling that the lesson was not worthwhile or that they participated badly at it. Additionally, bad lessons for experimental teachers and students were those in which participants were uncomfortable in dealing with the topic of the reflective materials selected for those lessons, resulting as teachers said in "bad, nonreflective discussions." If teachers felt themselves playing the role of the traditional teacher at experimental lessons, they also considered it a bad lesson.

As this section indicated, teachers' routines were filled with a variety of events and encounters which demanded versatility on their part. The description of these routines was intended to show from another viewpoint the character of the social organization of the Experiment at Butte and how the associations between teachers and students developed. Changes in teachers' routines and teacher "bits" as a result of the experimental part of the program are accounted for in the following chapters as they happened.

Summary of the Background to The Experiment

This chapter has presented many of the factors of the Butte project which served as a background to The Experiment. The description of ties to Project Homebound, experiment aims, and the social organization of the project were intended to show characteristics of the Experiment at Butte which provided the important bases for and conditions under which the experimental program operated. Where appropriate, as in discussions of the interrelationships between project personnel and between personnel and students and in the description of the home as an educational setting, for example, an elucidation of how these background items acted or could act to further experimental interaction aims was included. It was through these diverse elements of the social organization of the project that The Experiment itself proceeded.

In the following chapters the history of the Experiment at Butte is described. Changes effected by the experimental program in background items are incorporated throughout. They are summarized and further described in Chapter Four. Chapter Five includes a further summary and recommendations resulting from the experiences gained during the project in instituting such a program.

Chapter 2

PHASE ONE: IMPLEMENTING THE EXPERIMENT

This chapter is an account of the first phase of the Experiment at Butte. It includes events and frustrations in the program which preceded the actual start of The Experiment, such as preservice training, recruiting and grouping students, testing, beginning lessons, and organizing the design of The Experiment. It accounts for the project from August through December, 1971.

PRESERVICE TRAINING

After the Butte Vocational-Technical Center administrative staff had approved the final revised budget for the Experiment at Butte, six teachers and seven teacher aides were hired to be participants in the new education program. All were experienced in adult education because of their participation in Project Homebound the previous year. The criteria used for their selection was described in Chapter One. Since these teachers and teacher aides received preservice training during Project Homebound in areas related to dealing with teaching adults, understanding particular problems of low income and minority people, and selecting from among the materials available for teaching adults, administrators of The Experiment decided that no additional training in those areas was necessary at the start of the Experiment at Butte. Instead, preservice training efforts were directed to explaining and clarifying notions about the new project and changes to be made therein. The humanities consultants, Tom Huff and Gail Wallis, handled these preservice training sessions,[18] which were intended to inform and prepare administrators, teachers, teacher aides, the evaluator, and evaluation consultants for their participation in The Experiment. The participants' full knowledge of experiment aims and how to implement them was considered important to achieve before they could actually start The Experiment itself.

Due to a substantial cut in the budget intended for operating the Experiment at Butte, the original preservice training program outlined in the proposal was not possible. On August 24, 1971, project officials, humanities consultants, and evaluation consultants met in Butte to develop another, shorter training program and to discuss project goals and the possibilities for their achievement. As a result of this meeting four full days for preservice training activities were scheduled for September 7, 8, 9 and 15. Training focused upon four basic matters: discussion of the Berkeley Experiment, discussion of ways to structure interaction for developing curricula, discussion of experiences and knowledge gained in the Experimental Humanities Program at the University of Montana, and discussions of considerations in developing the Butte experiment in adult basic education.

On September 7, 1971, after a morning meeting with Herb Venner, program coordinator, and Dave Keltz, program director, to discuss the nature of ABE curriculums and teachers and students in Project Homebound from the previous year, humanities consultants met in the afternoon for the first preservice training session with all program personnel. At this meeting, teachers and teacher aides discussed their activities in Project Homebound, the problems they encountered in it, the successes they had, and the changes they wanted to make in order to improve the program. They discussed the benefits of the informal atmosphere in homes, individualized instructions which did not embarrass students, and the group needs of more advanced, prepared students. They viewed grouping as a problem in the program and listed it among their new goals. Other problems included the temporary, one-year nature of the project, routines that were too varied and demanding if a single teacher handled both basic and GED students or other students with diverse needs, and problems with various types of meeting places. These were discussed in Chapter One together with other background items to The Experiment. Finally, teachers talked about the limitations of the GED exam itself and how it influences students' learning and teachers' instruction. At this time, teachers noted that, ideally, an ABE program should, in consultants' words, offer basic literacy skills, and practical application and understanding of those skills, and should encourage the creative and imaginative involvement of a student with his education to broaden and direct his understanding of his education and himself toward a more reflective level.

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[18] Information about preservice training sessions held on September 7, 8, and 9 was derived especially from notes and observations of the humanities consultants and evaluation consultants and from letters to the project coordinator from Tom Huff, humanities consultant.

During the morning of September 8, 1971, humanities consultants discussed with all project personnel events in the Experimental Humanities Program at the University of Montana. In doing this they tried to clarify for program personnel aspects of the Tussman approach, the philosophy of that approach, and notions about the part the humanities consultants might play in improving and refining the Experiment at Butte along these lines. Dr. Huff's talk was intended to augment teachers' and administrators' knowledge of this approach through reading Tussman's book and building upon their familiarity with the project proposal. Consultants assumed in doing this that all program personnel had read and understood the proposal and were acquainted with experiment aims before being hired to participate in the new program. The discussion was directed, then, to drawing a possible parallel between beginning university students and ABE students in Butte. Both students were viewed as often entering an education program in order to achieve very specific vocational or skill-oriented goals. The education system was seen to be geared to meeting requirements of these narrow goals. Dr. Huff explained Tussman's philosophy by noting his view that the failures of a narrow education program center about a failure to develop the minds and reflective capabilities of the student in a manner that is commensurate with the development of more specific skills. Tussman's view is that educators do their students a grave disservice if they fail to give them the minds to use significantly the knowledge they have gathered. The talk stressed, then, following the Tussman philosophy that the experimental ABE program in Butte would attempt to train students in basic skills while providing in addition the understanding and wisdom necessary to bring these skills to an appropriate focus in the development of the whole person as a thoughtful person and citizen in his community. To accomplish this, reflective materials would be added to experimental students' normal ABE materials. Experimental teachers would teach ordinary

ABE skills, but would during a portion of their lessons, introduce and discuss reflective materials in order to develop the students' reflective capabilities and thoughtfulness.

A discussion among teachers followed this talk and continued into the afternoon. Teachers voiced their criticisms and suggestions about the experimental phase of the program. They discussed their ideas of the goals and capabilities of their students. Some teachers believed that their students would not be able to grasp the meaning of the materials, questions pertaining to ideas in them, or reflective ideas, for example. Teachers at the meeting seemed to agree upon the value of offering more abstract reflective materials along with basic skill materials, but according to humanities consultants, they were unsure as to the possibility of their doing so, partly because they themselves were unsure as to the means of offering that additional content in terms of materials and teaching methods.

To fulfill the teachers' and administrators' need to know more about reflective materials and teaching methods to use for introducing reflective skills, Dr. Huff discussed his own successes and failures at teaching the humanities. Also, he scheduled the September 15, 1971, meeting to be the first in a series of discussions on topics which the teachers might find helpful in offering reflective skills to their students. For additional meetings, teachers discussed the possibility of having other speakers come to talk to them about such topics as poetry, the history of science, the music of western culture, and others.

On September 9, 1971, the program consultants, program director, program coordinator, and evaluation consultants discussed the program design and aims, such as ways of dividing teachers and teacher aides into basic and GED teams and into experimental and control groups. Having some teachers teach basic students only and others teach GED-intermediate students only would reduce the kinds of materials which each teacher would have to work with. Consultants believed this to be crucial to the Tussman format. They talked about the necessary team emphasis in maintaining the spirit of The Experiment and the need to pay close attention to the observations and suggestions of staff members. They discussed also at this meeting the need to have continued funding for the program and the possibility of using the qualified group of teachers in the Experiment at Butte to train other potential ABE teachers in this approach to adult basic education.

After becoming more familiar with ABE programs by reading various adult education materials, the humanities consultants returned to Butte to hold the final scheduled preservice training meeting on September 15, 1971. During a morning and afternoon seminar, humanities consultants presented materials on political philosophy, a topic teachers requested since they believed that many of their students were interested in these topics already. Materials discussed in Dr. Huff's talk, which he presented as he would to a college humanities class, were taken from Plato's Apology and Crito and Thoman Hobbes' Leviathan. This discussion focused on the understanding a student might acquire of his own political system when he looks at two contrasting political theories, one which has greatly influenced the formation of the American political system and one which contrasts with it. According to the consultants, having this kind of overview of his political system a student might be more likely to understand and operate it. During the sessions, Dr. Huff asked questions similar to those teachers might ask their own students. For example, they were asked to distinguish between some important ideas in the theories of Hobbes and Plato regarding their conceptions of man's nature, the classical idea of a government's duty to its citizens compared to current ideas of citizens' rights, and notions about a person's relationship with his government.

Following this presentation teachers expressed mixed feelings about the possibilities of presenting similar topics to their students using this approach. They questioned their students' abilities to deal with abstract concepts. Some of the teachers having experience with very basic students felt that the students' reading or speaking skills would not be adequate to allow them to grasp or deal with even the most simple abstract concepts. Others felt that GED students would rebel if new materials were added to their curriculum because they might distract from the students' strong GED goals. Teachers agreed, however, that some of the teachers who wanted to participate in The Experiment should be selected to be in the experimental group and should start offering some reflective materials to students who were qualified to handle the materials. They believed that other, more simple reflective materials should be developed for basic students to determine their applicability in a very basic curriculum. They agreed also that the consultants should visit ABE lessons with ordinary students to give the consultants a better understanding of the type of students encountered. In doing this the consultants would be more prepared to offer help and suggestions to teachers in The Experiment.

After this meeting with teachers and adiminstrators, the consultants met with the administrators and Mr. Brent Poulton, state ABE director. They talked about the need to select immediately the three teachers who would offer reflective skills along with the regular curriculum. They decided to plan other inservice training meetings after consultants had a chance to attend a number of ABE classes.

Following these preservice sessions, teachers began engaging in recruiting, grouping, and teaching activities. Administrators and consultants believed that teachers adequately understood the philosophy of the Tussman approach, instructional and reflection aims of the project, and the roles of experiment and control teachers.

RECRUITING STUDENTS AND PLACING THEM WITH TEACHERS

Immediately after completing preservice training sessions, teachers and teacher aides who were grouped into compatible teaching teams recommended by consultants at the preservice training meetings began to recruit students for the Experiment at Butte. Since Project Homebound was a successful program and was well-liked by Butte students, and because the new program was designed to be an improvement and significant refinement of Project Homebound, recruiters decided to present the Experiment at Butte to prospective students as Homebound II, an extension of Homebound. Recruiters visited the homes of last year's students who expressed a desire to continue their education and made additional visits to students referred to them by various agencies in Butte, such as the welfare department and the Vocational-Technical Center, and by former students. Since information about last year's program was discovered to have been spread primarily by word of mouth from student to prospective student, other recruitment advertising using the news media was kept to a minimum. This proved to be an effective technique as many student applications were quickly received.

The program coordinator received all student applications at the project headquarters. In reviewing each application, students were categorized as to the basic, intermediate, or GED education levels. Once the numbers of students at each level were known, the six teaching teams were divided into basic and GED-intermediate teams. Three of the teams were designated as GED teams. They handled all intermediate and GED level students. The other three teams were designated as basic teams. Their students were basic level students who had not gone beyond the sixth grade in formal education or were foreign born students whose knowledge of reading, writing, or speaking English warranted instruction in these basic skills. Many of these students also wanted to meet naturalization requirements and were placed with a basic teacher to work toward this goal. Students were then assigned to the appropriate teams to balance the number of students handled by each teaching team. As project personnel had hoped, they were able to insure that basic teams would be assigned only basic students categorized as indicated by information as to their education level and goals on their application forms. GED teams, also, were assigned only intermediate level and GED level students. Besides, students' education skill levels upon entering the program other criteria were used in matching them with particular teachers. Sexual and racial features and nationality of foreign born students were of importance in making the assignments. Oriental students were assigned whenever possible to one team, Spanish speaking adults to another, and so on. Attempts to make teams somewhat homogeneous were designed to lighten teachers' lesson planning tasks and facilitate the desired grouping of students within teams. Other considerations in grouping were students' teacher preferences, if any, and neighborhood geographical locations. If possible, students who participated in the program the previous year and requested a certain teacher were assigned to the same teacher unless the teacher's student roster was already filled or the teacher's newly designated GED or basic team affiliation conflicted with the student's own educational level.

Recruitment was a continuous task throughout the year since students were referred constantly to the Experiment at Butte by other Butte agencies and education programs and by participating students. If originally recruited students terminated their education or joined other education programs, new students were added and assigned to the appropriate teams.

Once the initially recruited students were assigned to one of the six teams, teachers and teacher aides began to meet with their students to decide places and times to meet for lessons and to begin to group students for instructional purposes.

GROUPING THE STUDENTS

Grouping students within teams was a goal of the Experiment at Butte. In Project Homebound, students generally received instruction on a one-to-one basis with their teacher, teacher aide, or volunteer. The curriculum for each student was individualized to fit his needs and his unique goals. Teachers worked to eliminate the feelings of inferiority or embarrassment a student might ordinarily have in a formal classroom situation. Individual lessons in homes were ideal for purposes of informality as discussed in Chapter One. However, teachers realized the value of group lessons for slightly more advanced and confident students. In groups, students and teachers would have the opportunity to share information in discussions about materials under consideration. Students and teachers would thereby benefit from their interaction with each other as a group. Additionally, teachers' time spent in preparing lessons and selecting materials would be reduced. They would be able to reach a greater number of students. For these reasons, the goal for grouping students into small instructional units in the Experiment at Butte was considered important. Students would receive group instruction and, if necessary, to keep them at the learning level of the group or, if requested by individual students, they would additionally receive individual tutorial instruction. Teachers reported that grouping was a problem in Project Homebound in which many students refused to be in groups and preferred individual meetings with their teachers. Meeting grouping goals was a partial success in that some, but not all, of the students were grouped. Some teachers were more successful at using grouping techniques than others.

Grouping Problems

Although many students were grouped successfully within teams and with much student approval, many students in the Experiment at Butte were never brought into group sessions because of their own refusals to do so or because of judgments made by teachers. As in Project Homebound there were various problems in the grouping process and many reasons for them.

There were several apparent barriers to grouping which teachers anticipated from the beginning: grade level differences, language barriers, social class differences, and student embarrassment. These problems and others not anticipated prevented some teachers from grouping particular students. Because of them also, some students themselves refused to be grouped. The major problems are discussed here. Successful grouping was accomplished by other teachers, however. Their techniques are discussed in the next section entitled "successful grouping."

Varieties of students. Students in the Experiment at Butte were, as indicated in Chapter One, highly varied in numerous ways. They were at many different educational levels and had numerous interests and goals. Very often, some teachers believed that individual instruction only was indicated for many adult students for these reasons. They did not encourage their students to group. Some teachers believed that lessons with these students were not possible even if people at similar levels were put together. As indicated in the next section, there were other teachers who categorized students as to education levels and interests quite successfully and were able to group them. They made up for certain students' deficiencies or additional interests at tutorials. Both GED and basic students were among these.

Perhaps the only group of students who could not be grouped during the year were the students classified by teachers as unteachables or very slow learners. These students were dispersed among the teams. A single teacher therefore could not group all slow learners as might be plausible in this instance. In cases where a single teacher had a number of slow learners this year they still could not be organized into a group because of conflicting daily schedules. Teachers otherwise would have liked to place them together.

Language barriers of undereducated American-born adults and of foreign-born adults provided the second problem for grouping. The barrier existed in problems with communication in a group setting and the possible embarrassment or discomfort which resulted. To bypass this problem many students were brought up to a certain skill level by their teachers in tutorials and were then encouraged to join a group made up ordinarily of people who spoke their native language. Other students were maintained in a more protected tutorial atmosphere. Some teachers did not attempt to group these students at all during the project, but many expressed a desire to do so later in the year and probably would have entered a group if asked to do so.

Social class problems were apparent in grouping endeavors. Although most of the students, but not all, were drawn from lower income groups in Butte, foreign-born students especially recognized social class differences based upon socioeconomic distinctions made in their native countries. A well-educated Korean woman, for example, whose family in Korea was considered to have high status, was uncomfortable and did not feel free to associate with other Korean students whose families were members of lower social strata in Korea. Spanish students because of individual prejudices often avoided educational groups in which Mexican adults participated. If prejudices were strong, teachers were not able to group those students together or had to fit them into other groups less suitable educationally. Some students could be convinced to participate to a degree, however, as evidenced by the English Club and some large GED and other groups.

Friendship groups constituted a special kind of problem in grouping. At times teachers used them as assets to forming groups. Problems existed if educational levels or abilities were very apparently different. Teachers thought it best educationally to separate these students and reintegrate them into other groups. Students sometimes refused to be separated from their friends and insisted on being taught with them. Teachers noticed that in this situation, the more advanced students' achievements were not as great as they might have been otherwise. Though this facilitated grouping per se, the students generally worked at the slower student's pace. Teachers found dealing with such friends difficult in these instances, but were not actually able to regroup them in most cases since students sometimes threatened to quit the program when forced to receive instruction apart from the friends with whom they originally joined. The importance of and value of having friends in groups are further discussed in a following section.

Timing. A final major problem encountered, but not actually anticipated, was the timing element involved in bringing students into groups. Certain teachers in the program decided not to mention grouping to all or some of their students until much later in the program. Their reasons for delaying to prepare students for the notion of grouping were varied. A few teachers admitted that they were simply reluctant to begin efforts to group because they were afraid that students would feel threatened. They did not wish to intimidate students and develop bad relationships from the beginning or to have students drop the program when they discovered that the program had changed somewhat. Some teachers believed that their friendships with students would break down. One teacher stated that she "did not feel personally confident dealing with groups and decided she could get more done with single students or with husbands and wives alone." Other teachers' reasons for not beginning to group students in their teams were that they wanted to meet with students for a time (up to a few months) in order to assess more fully the students' traits and educational standings. They wanted to form "the best groups possible" and, for that reason, they waited. At the start, a few teachers viewed the other problems listed with concern and began to believe that matching students was an impossibility. They, too, delayed grouping many of their students until they saw from others' successes that grouping was indeed possible.

Reasons aside, some of these teachers did hold off grouping attempts and giving students information about their grouping plans until later in the program. It appears that this delay in itself negatively affected their later endeavors to group. Students, in the meantime, enjoyed and became used to the tutorial form of instruction as many had in Project Homebound. Without knowing about and consciously preparing for being grouped eventually, notions of grouping came as a surprise. They already had a comfortable instructional pattern and wanted to maintain it in numerous instances. As a result, these students balked at being in a group and felt threatened at the prospect of joining. One student's comment about disliking groups expressed this timing problem when he said:

> I don't have any use for a group. My teacher came to me every week for a couple of months. She seemed okay. Now she doesn't want to do it anymore. She wants to teach me in a group. It's a shock. If I would have known sooner I could have worked harder and maybe I'd be ready for being with others sooner. Now, I'm used to my pattern and I'd be kinda scared to start a group now to tell you the truth. Maybe it would be easier a while ago when everyone was starting out. I mean, it's a surprise. I just can't do it.

Other comments were similar. Had these students been grouped or prepared for being grouped earlier in the year, perhaps they would have been less resistant to grouping matters.

Together with a delay in timing, the manner in which teachers presented grouping notions to students was identified by students as an important factor in their wanting to group. Apparently, some teachers told students that they "would be required to try to form educational groups but that they (the teachers) knew that individual lessons were the only ones that really worked." Students declared that attitudes like this made grouping seem unimportant, not really beneficial, and uninteresting. As discussions of the teacher-student relationship indicate, students cared about teachers' attitudes and were highly sensitive to them. As the following section states, teachers who presented grouping positively and enthusiastically reported that they had many very successful groups.

These were the crucial grouping problems encountered in the Experiment at Butte. As mentioned, because of them, many students did not become participants in groups. Efforts to actually meet the goal of grouping all students were therefore only partially accomplished. However, due to the troubles which existed, program personnel learned much about good and bad ways of grouping adult students. All grouping efforts, positive and negative, were therefore successful and worthwhile because they made possible the recommendations and suggestions for future grouping endeavors. Recommendations are described in Chapter Five of this report.

In the following section, an account of successful grouping techniques is presented.

Successful Grouping

After the initial number of students were recruited and assigned to one of the six teaching teams, teachers and teacher aides met with each of the students on their team to become acquainted with them and their goals, interests, and needs and to discover the specific days and hours most convenient for their lessons. At this time, some of the teachers who were most successful at grouping mentioned to their students that they wanted them to participate in group lessons and, at the same time, explained to them some of the benefits of such an arrangement compared to having only individual instruction. Advantages cited by one teacher to her students were that "lessons with another student or a few others would be fun, would avoid putting one student under pressure as in a one student-one teacher lesson, and there would be times when students might learn from each other." They encouraged their students to participate in groups at the start if their skill levels were high enough for them to benefit from participation and if the students felt confident at that level. They stressed also from the beginning to those students who were not yet ready on the basis of skills or confidence that they should strive to join groups later in the year. As noted in the previous section, other teachers chose not to even mention grouping to their students until much later in the project. In many cases these students never did group together and continued to find comfort in tutorials only.

Once the teachers who initially discussed grouping with their students discovered which students were interested in grouping immediately or in the future, they began to match students' characteristics and qualifications in order to organize individual groups. In their matching they considered and categorized the students' educational level, geographic location, educational goals and interests, personality traits, study habits, if known, racial or nationality characteristics, preferences for groups, available days and times to meet, and other peculiar personality traits or individual preferences. Students' friendship groups were noted closely also. The importance of friends warrants further consideration and is discussed shortly.

After matching these traits in as many instances as possible, teachers again discussed grouping with their students at subsequent meetings and told them of the possibilities of their being grouped and of the students with whom they could be grouped. Students often caught the teachers' spirit to group and became eager to try participating.

The groups which were set up as a result of these endeavors at the beginning of the project or whenever new students entered the program were made up of a small number of students, usually two or three and sometimes up to ten, who were at a generally similar level of education (individual tutorial combined with these helped keep them together), shared similar educational goals and interests, such as members' needing to know mostly grammar or math for the GED test, and had personalities that were fairly complementary in order to make lesson discussions as equable and interesting as possible. Essential to any group was that its members had to have the same hours of the same days available for lessons. Whenever possible, teachers grouped students together if they lived in a similar area in Butte. Often, friends asked to be together. If their educational levels were close teachers grouped them. People who worked at jobs together frequently requested to be grouped in the same educational unit. In most cases, too, foreign-born students wanted to be grouped with others of their own nationality because they felt more comfortable with those with whom they could communicate in their native language.

Many groups of basic and GED students started forming by mid-October. Some others were brought into existing groups or made up new groups later in the year. Foreign students, for the most part, wanted to join educational groups. The English Club made up of Oriental students, another group with two French ladies, a group of two German ladies and a Greek girl, a group of Chileans, a Dutch family, and numerous foreign husband-wife teams were notable examples. Some American-born students were also willing to join groups and made up a number of husband-wife teams and larger groups in the program. GED groups which met at neighborhood centers were perhaps the largest of all of the groups. Up to ten students met on week nights at the uptown neighborhood center, for example.

Once grouped, members of the group as a unit made decisions as to the regular times they wished to meet and locations of their group meetings. It is important that the students themselves decided as a group in these matters. Times selected were those when all students and the teacher were free. Locations varied. Some groups preferred to meet at one of the various centers available in their neighborhoods. Others met in one of the students' homes believed to be the most quiet and conducive to learning, or in the teacher's home, which was the usual choice of the English Club. Some groups rotated their meeting places by going to one student's home one week and to one of the other student's home the following week. As noted, some students who joined group lessons also participated in individual tutorials. They arranged these sessions on their own with their teacher or teacher aides and not with their group.

For students who were not in groups because they were not confident as yet with their basic skills or for other reasons, some teachers designed measures which would acquaint them with a group educational situation. Asking their teacher aides, whom most students trusted, to participate in the regular teacher-student tutorial was a useful way of doing this. Other teachers drew students into group situations by inviting them to senior citizen movies or other film series programs in Butte, such as the Kenneth Clark, Civilization series, which was shown at Montana Tech, a state college located at Butte. At these, students felt relaxed and were able to become acquainted with other students. Once drawn into a group situation, even doubtful students were more easily placed in education groupings in the Experiment at Butte.

Most teachers were successful at grouping at least some of their students if traits in general could be matched and common meeting times arranged. Teachers found it essential to categorize students in loose ways in order to match them. Students did not have to share "everything" in common. The teacher's attitude in initially telling students about grouping ideas was discovered to be very important in the students' own attitudes about those ideas. There were, of course, a few students who declared that they "would never group, no matter what," but these did not seem to be the majority of the adult students in Butte. Students themselves believed that if other adults were grouped in the manner discussed in successful grouping techniques, they, too, would be less resistant to joining small educational groups.

The importance of friendship groups in grouping procedures and in the general Experiment at Butte was taken into account by teachers. Together with their students they became increasingly aware of the impact of friendship groups on educational endeavors. Students' friends and other significant others (persons whose opinions they considered important in their daily lives) appeared to influence the students' achievement and participation in the education program.

It is apparent in the discussion which dealt with friends in educational groups that teachers disliked grouping some friends whose talents and educational levels were diverse. At students' demands, they did group some of these adults. They found that more advanced students worked at the less advanced students' pace. The advanced students' achievements, teachers believed, were decreased because they were going over material with which they were already familiar. To provide somewhat for the advanced students in these situations, teachers sometimes spent a small portion of time in the group lesson or at a special tutorial giving them higher-level materials to deal with.

If friends were at similar education levels, teachers willingly grouped them saying that such a situation was ideal in terms of grouping and achievement. With small groups, handling varied interests was easily possible.

Participation in the program and in group events, according to teachers and students, was heightened if a group of people who were already friends were grouped. They noted that students were absent less often under these circumstances as well. Meetings were important to attend for friendship's sake as well as for getting an education. In terms of The Experiment and meeting experiment interaction aims where groups were designed to be friendly and informal in order to stimulate a spirit of learning together and cooperation among participants, having people in groups who started as friends was distinctly helpful. Friends learning together helped one another understand common lessons. When more advanced students were grouped with friends beneath their education level, the advanced students provided help and encouragement to the others and sometimes tutored them informally in between lessons. They naturally kept the spirit of The Experiment.

Besides friends, the significant others who often influenced achievement and participation in the program were spouses, children, parents, members of the student's racial or nationality group, or the teachers themselves. Since teachers' opinions mattered to students as friends' opinions did, their encouragement spurred students on to participate and accomplish educational goals. Their discouragement often worked the reverse. A husband's constant prodding of his wife to speak English well or children's opinions of their parents, for example, were sometimes the students' reasons for starting adult education programs and continuing their participation in them. They were also important reasons, according to students, to want to achieve as much as possible during participation. Teachers, as described in Chapter One, often developed close, friendly care relationships with students who thereafter saw them as significant others. Some students wanted to achieve and participate in ways that would please the teachers whose opinions were so highly valued. Of course, teachers, too, considered students to be their significant others. They therefore tried to please the students.

It was for these reasons that wise grouping methods took friendship groups and other significant others well into account. The drawbacks, some believed, were worth the other benefits related to The Experiment, especially.

While doing the grouping, or, at least during initial meetings, teachers gave diagnostic tests to their students. This is discussed in the next section.

Initial Diagnostic Tests

According to the provisions of the proposal, all students were to be given tests upon entering the program and at the end of the year. Tests were designed to be used by teachers to indicate if actual ABE skills were increased and, if they were increased, what skills and by what kinds of students. As teachers recommended, tests were intended, therefore, to be specifically diagnostic in nature to give them a better idea of their own students' needs. Tests served to assist teachers in determining the core areas of ABE curriculum in which students needed the most help. They helped teachers in selecting materials that were the most suitable for fulfilling these needs. The curriculum for each student was developed around these block areas of instruction: computational skills, consisting essentially of simple mathematics; communicative skills, consisting of reading, writing, and speaking English; and courses leading to proficiency in computational and communicative skills at a GED level. In many cases, the initial diagnostic tests provided information as to which areas to emphasize, which block areas to omit or include later in the program, and at what levels students were ready to start.

The individual tests to be used in the Experiment at Butte were determined by the teachers themselves as a group. Teachers additionally used their own discretion in selecting from among these and determining to which students tests were to be given. Generally, teachers tested only those students whose test scores would be actually helpful in revealing students' deficiencies. Teachers believed that they were adequately familiar with other students' needs and deficiencies since many were students the previous year. They decided, therefore, not to test many of these individuals. Other students who teachers did not think needed to be tested formally were those adults for whom testing was simply contraindicated. "Some of these students," said one teacher, "left school for that very reason. They didn't like to be put on the spot. They became aware that they were not achievers and now they don't like to be questioned about it. A test becomes a traumatic thing." Teachers believed that testing sometimes made the teacher-student association begin badly because of the adults' fear of or dislike for formal tests.

Additionally, the teachers could not find tests to their liking. They complained that most were either too long or too advanced for many students. Their beliefs were born out in that some of the tests which were administered took very basic students three full two-hour lesson periods to complete. Some students found this disturbing and discouraging. Many could not read the tests. Then, questions were read to them. Teachers sometimes found that students who could not read English still passed the more advanced tests, such as the Follett test, with much success. With such students as this in the program, comparability of scores from one student to the next within and among groups was severely questioned by teachers. As a result a number of students were not tested or were tested informally in other ways. Teachers used their discretion and knowledge of their adult students' preferences in deciding when, if, and to whom they should administer tests.

The tests actually used for diagnostic purposes were either those designed by teachers themselves for the more basic students or were forms A or B of the Student Survey test published by the Follett Publishing Company, the FET (Fundamentals Evaluation Test) which was a test for the more advanced student. The Student Survey covered four areas: arithmetic computation, arithmetic problems, reading comprehension, and word recognition. The FET measured these four areas and included two others: history-social science and science. The Student Survey seemed to be the better test of the two since teachers believed that many students in the program were within its range of educational levels. As indicated, teachers judged both tests inapplicable to some students. They did not formally test these students but instead placed them according to their familiarity with the students' needs based on teaching them previously or according to indications resulting from their own, personally devised means of testing. The diagnostic tests compiled by teachers were generally not quantitative and were many times shorter than the other tests listed. One teacher and her teacher aides developed three tests: a basic sight-word test, a phono-visual test, and a test from the back of a reading book called the Adult Reader. Examples of these are included in the Appendix. Other teachers developed their own spelling or math tests. Some simply took questions from work books at various levels. Students then began their lessons at the levels at which they began to lack skill proficiency. Teachers gave these informal tests at the beginning, the end, and often throughout the year for their own information.

If testing were indicated it was done while teachers were meeting their students at the start of the program before actual instruction began and while teachers were involved in grouping their students. Once these were accomplished, actual lessons began.

BEGINNING LESSONS AND DIVIDING TEACHERS INTO EXPERIMENTAL AND CONTROL GROUPS

On October 4, 1971, teaching actually began in the Experiment at Butte. Evidence of what teachers had decided upon on the basis of formal and/or informal tests, prior knowledge about the student, and successful or unsuccessful grouping attempts finally came into focus through the curriculums that were designed and the lesson plans that were developed for the individual students or groups of students. With "getting started" questions, such as testing and grouping, in hand teachers and students both expressed relief at actually starting to become involved in lessons. Teachers began to establish their varying routines. Students and teachers both began to establish friendly caring relationships through their developing interactions with one another. Students started to see that their teachers were, in fact, teachers-as-friends. The distinguishing features of these relationships were described at length in Chapter One. Teachers and teacher aides began to meet daily to plan lessons and share experiences.

Reluctance to Participate in The Experiment

At this time, too, administrators urged teachers to voluntarily divide themselves into the previously mentioned experimental and control groups. Several teachers expressed a slight interest in being in the experimental group but were somehow unsure if they really wanted to go into it all the way. They said that they might add some extra pieces of literature to students' ordinary basic or GED curriculums at times during the year but did not want to formally volunteer for the experimental group because they did not want to be required to do so. They wanted to be limited or occasional experimental participants. Two of the basic teachers, Carlin Good and Mary Madlena, however, expressed a much greater interest in participating in The Experiment. Though they were still very unsure as to how to proceed, they formally volunteered for the experimental group. Pat Cork, the other teacher who became a member of this group formally joined somewhat later. Her decision to join was partly voluntary, but consultants and the program coordinator urged her to do so in order to incorporate a GED team into The Experiment. Two basic teams and one GED team thus made up the experimental group of teachers.

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Prior successes. The reluctance of teachers in the program to want to be a part of the experimental group was due to a number of factors. These same factors delayed some experimental teachers, once chosen, from actually beginning The Experiment. Because this problem pervaded most of the events in the program until mid-December it is therefore important to discuss here.

Experimental teachers and aides became increasingly frustrated during these months in thinking that The Experiment as a real, working part of the program would never really start. An important factor in their thinking was the success they had previously experienced in other programs by teaching in more conventional ways and with more traditional materials. Success in Project Homebound, for example, made some teachers want to keep their methods and materials the same in order to insure similar successes with students in the Experiment at Butte. They believed that fully becoming a part of the experimental group would necessitate too many changes in their techniques. They were, of course, willing to learn new approaches but did not want to have to use them except occasionally. Besides wanting to insure students' approval, some teachers and teacher aides were reluctant to participate in The Experiment because they had techniques of teaching and using materials which they had developed from previous teaching experiences. They were comfortable using these approaches and felt that they were good at doing them. "To save face," as one teacher put it, "and to feel successful in teaching we try to continue ways of doing things that worked before." Prior successes were therefore important reasons for teachers avoiding experimental group participation. In addition, their initial misconceptions and misunderstandings were equally crucial factors.

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Initial misunderstandings. Preservice training was directed, as previously indicated, toward explaining the philosophy of the Tussman approach, discussing appropriate teaching methods to use in dealing with reflective materials, and drawing parallels between the Tussman model and the Butte experimental program. Humanities consultants assumed in these sessions that teachers were already familiar with project aims as described in the proposal and with Tussman's book. Preservice training was intended to augment this knowledge. Apparently, this was not adequate preparation since many misunderstandings still existed by the time classes were underway.

There were several misunderstandings. First of all, some teachers believed that experimenting teachers and students were supposed to deal only with reflective materials during their lessons. They believed that reflective skill learning would replace ordinary skill learning, such as reading, writing, or speaking English, in experimental groups. Others felt that even if skill learning were included, reflective skill learning would take precedence, at least, leaving the student disadvantaged in ordinary skill learning. "Since students' goals often centered about these ordinary skills accounted for in block areas of the ABE curriculum," some teachers stated, "the student would be cheated and frustrated at not having his goals met."

Presuming that reflection was to be the only or at least the most predominant skill to be accomplished with experimental students was not accurate in terms of The Experiment, its aims, or its history. From the beginning, and as experimental teachers discovered, The Experiment sought to combine the teaching of reflective skills with teaching the basic skills to insure added benefits for the student. If reflective skills or interaction aims of The Experiment failed, students would still be taught how to read, write, speak English, or learn mathematics and other communications skills. Thus failure in one part of the program would not mean necessary failure in the other. Students' goals were not to be compromised or disregarded thereby. Some teachers who were not informed in the beginning as to the nature of The Experiment continued to hold the same beliefs until the end of the program. Perhaps consultants and administrators initially should have stressed the notion that the only failure for the Experiment at Butte as a whole would be in not even trying The Experiment and that students in The Experiment would still learn basic ABE skills.

Another misunderstanding resulted from thinking that the Butte program was to be an exact replica of Tussman's own experimental program when, in fact, it was not. As indicated in consultants' early preservice meetings with teachers or with administrators and in their letters written to the program coordinator, it was intended that the Butte program should proceed according to Tussman's educational philosophy and find inspiration from it. The resulting program was an adaptation of the Tussman model geared to Butte and to adult basic education. "It's going to be impossible to teach ABE students as if they were college students. We should stay at our students' levels and not try experimenting," were common complaints illustrating this particular misunderstanding.

Believing that students of experimental teachers and teacher aides had no choice in accepting or rejecting the experimental materials or approaches was another misconception. When experimental teachers began

The Experiment, which is discussed in Chapter Three, they assumed that all their students were experimental in that the teaching approach would be compatible with Tussman's philosophy and that they would at least try to add humanities and/or other reflective materials to lessons to see whether or not students could deal with them. Upon introducing the materials, they discovered that some students, such as the very slow learners, the strongly oriented GED students, or those students who could barely communicate in English, were not at that time good candidates for the reflective materials. The teachers then waited to introduce reflection again until the students' communicative skills were improved or until students who disliked the materials changed their attitudes or found more acceptable topics to consider in reflective ways. Some students therefore were not "forced" to be experimental. Their wishes were not compromised.

Finally, misunderstandings about actual definitions of reflection occurred at the beginning among teachers and teacher aides. Unclear notions of what reflection meant were important factors in teachers not volunteering to be in the experimental group and were even more crucial in experimental group teachers' failure to start experimenting after agreeing to do so. One teacher who was uncertain of the meaning of reflection stated this problem completely by saying:

> I thought I knew what reflection was at those preservice meetings. We all used the word easily and made Dr. Huff think we all clearly knew what was going on. I realize now that I didn't then and I don't now. I liked the idea behind it, a broad education and thoughtfulness, so I became an experimental teacher. Now, I can't translate reflection into an actual teaching approach. I need to know what I'm working toward in a lesson with reflective materials. I don't yet, so I haven't started.

Until this matter was made more clear to those teachers who misunderstood it, as indicated in Chapter Three, they did not begin to actually implement reflective aims.

Teachers' preconceptions. Because the teachers and teacher aides were participants in Project Homebound and other educational programs prior to their joining The Experiment, they entered the new program with certain preconceptions about teaching, dealing with adults, and using certain kinds of materials. They also came with preconceived notions about their own abilities and skills and about students' skills, preferences, needs, and interests. Their preconceptions pertaining to materials, their own abilities and skills, and the students' traits were the most important in terms of The Experiment. Because of the familiarities and preconceived notions derived from Homebound, teachers were skeptical from the start about possibilities for implementing The Experiment. Preconceptions prevented experimental teachers from beginning their experimenting even after lessons were underway.

As indicated in the account of prior successes, teachers came into the Experiment at Butte holding certain ideas about their own successful attempts at teaching adult students. Some were convinced, for example, that individual instruction techniques were practically the only ways in which adults participating in the new program could be reached. They did not want to attempt to group students as this would ruin their previously beneficial techniques. Also, teachers had preformed notions about their teaching skills. They often wanted to stay with an approach that seemed to work. Many times they said they would not feel confident trying new methods or new materials because of skill limitations. This was apparent in their reluctance to try reflective materials. They noted that they were not basically skilled in the humanities in most cases and would therefore not "be able to do" the materials. They were unsure about their own reflective capabilities.

Teachers had similar preconceptions about students. These were revealed especially in talk at the preservice training sessions about the possibility of introducing reflective materials in discussions with ABE students. Several teachers were very doubtful as to whether their basic students would be able or willing to grasp the content and purpose of working with reflective materials. They saw them as unlikely candidates for reflection. GED students, they reported, might be able to handle the materials but would reject reflective materials as distractions from their goals. They viewed students as unreceptive or, at least, uninterested. Additionally, some teachers assumed that for all students, ABE skills were far more important to have than reflective skills. They seemed to define expectations for the students according to skills. Other teachers, for example, conceived of most adult students as embarrassed and therefore unwilling to group. As indicated in following chapters, many of these preconceptions were unfounded but were part of Homebound heritage.

Misunderstandings, preconceptions, and previous successes therefore influenced the beginnings of The Experiment profoundly. Through them, some but not all of the teachers often formed very negative opinions about the program and were, as discussed, reluctant to join the experimental group. Once in the program, some of the teachers and teacher aides did not actually begin The Experiment until they discovered for themselves that some of their preconceptions did not fit reality and that their misunderstandings were just that. According to one teacher who had only a few misgivings about The Experiment:

> I think teachers are kind of displaying their own attitudes when they haven't really discussed the thing with the student. I discuss with the students. I've found that the ones that are able are willing. Even one who is very limited in her communication skills is all for it. She goes to the session on Civilization and I think that it's very hard for her to understand, but she says that she wants to keep going. We have a discussion after. She hasn't been to Europe, but she can talk a little about Japanese architecture and the way life was there. It's interesting for her. Still, it's sometimes hard for the other students to understand her. I wouldn't have thought she would have been a good candidate for the reflective materials, but she is if they are simplified enough for her.

Initial Effects of Experimental-Control Divisions on the Teaching Community

In previous sections the well developed community of teachers at the beginning of the Experiment at Butte was described. Their sense of community developed from their informal and friendly associations formed during Project Homebound and carried over into the new program. From the time preservice training began, teachers actively shared ideas and materials and formed among themselves a team of sorts. The teacher aides participated in the community, but teachers were the most active. The project coordinator called no regularly scheduled meetings during the autumn.

When teachers were asked to divide themselves into experimental and control groups, teachers saw no important threats to the community as a whole. They believed that since the communication among the teachers as a group was already so established and informal, making such teaching group distinctions would not break down the communication lines.

They all felt that they were really doing the same kinds of things with their students. From this beginning until January when the experimental teachers actually began to implement experimental aims, the teaching community remained intact. They, in fact, did not recognize any distinctions between the two groups until the experimental teachers began working on the new and experimental facets of their part of the program. These groups began to gradually set themselves apart and became important to the program as individual units. This process is accounted for in Chapter Three and is summarized further in Chapter Four among changes brought about by The Experiment.

After being divided then, teachers, except for one experimental teacher, proceeded by acting as if the formal control-experimental distinctions did not exist and that the new program was really a replica of Homebound with groups. They carried out ordinary individual or group lessons centered around core ABE skills and used traditional materials. The Experiment at Butte and Project Homebound apparently shared enough traits in common to make it possible for teachers and teacher aides to define the two as nearly the same. At the start, only one of the experimental teachers understood perfectly the nature of reflection and the methods of introducing the kinds of materials that foster this kind of intellectual development in students. She began to introduce experimental materials to some of her students early in October, just after instruction formally began on October 4, 1971. The other two experimental teachers did not feel adequately prepared at that time to begin to experiment, although they said they were willing to try. Consequently, only a small number of students, all categorized as basic, became active participants in The Experiment during the fall, 1971. Other teachers brought themselves to begin experimenting only after inservice training sessions in December. Chapter Three discusses this.

Control group teachers had much success in grouping and organizing their own students. Groups at the various neighborhood centers throughout Butte were set up and met regularly. Teachers reported that some students were still having tutorials to catch up or to keep up with their various groups. GED teachers in the control group cited plans to continue to group other students when ready since their already organized groups were doing well. They mentioned that they were planning to introduce new materials not accounted for in workbooks to students in order to vary their lessons to encourage discussion. Some control group students who were basic started to participate in the English Club where the teacher introduced different forms and topics of literature to them. The teachers maintained these routines throughout most of the year, if in the control group.

BEGINNING TO OBSERVE LESSONS

On October 12, 1971, the evaluator started to interview students and observed several lessons to develop a more clear idea about the nature of ABE instruction. Only a few teachers from both the control group and experimental group were willing to be observed. Other teachers did not want observers in their lessons until they regularized instructions and established more informal, friendly interactions with students. They appeared to want to present "perfect" lessons. Observations and interviews

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that were permitted immediately were enormously helpful in developing notions about problems of "getting started" and gave insight into the developing relationships between teachers and students and among students as a group. Teachers began to understand some of the evaluator's roles in the program at this time.

On Tuesday, November 23, 1971, consultants Tom Huff and Jon Driessen visited Butte in order to observe lessons and meet with individual experimental teachers. They originally hoped to begin observing earlier in the year but the coordinator advised waiting as teachers were not yet prepared to have them come. During their visits with teachers and from observing their lessons they discovered the need for an inservice training meeting to dispel misconceptions about The Experiment and to stimulate teachers who had not tried experimenting with their students to do so. The teachers who had not tried The Experiment did not know how to get the reflective materials into their work with their students. At this visit, the experimental GED teacher agreed to formally participate in the experimental group after talking with consultants.

As a result of this visit, the humanities consultants set aside December 6 and 7 for inservice training meetings to discuss with the three experimental teachers and their teacher aides the nature of work typical of the humanities and ways to further deal with them.

Until that time only one teacher, as mentioned, participated in The Experiment. In informal chats, teachers and teacher aides not experimenting continued to negatively describe and evaluate The Experiment, providing little support for the other two experimental teachers to begin their experimenting endeavors.

Meetings on December 6 and 7 proved to be the turning point in the Experiment at Butte. As indicated in the following chapter, shortly after these sessions The Experiment was started at last by all experimental teachers to a degree. Measures were taken later on to maintain the developing spirit of The Experiment. Chapter Three presents an account of The Experiment from its actual beginning until the end of the project in June.

Chapter 3

PHASE TWO: ACTUALLY BEGINNING THE EXPERIMENT

INSERVICE TRAINING AS THE STARTING POINT

On December 6 and 7, 1971, the humanities consultants held inservice training meetings. From the November trip to Butte, they realized the need for such a session to clarify The Experiment for experimental teachers, dispel misconceptions, and to get the experimental part of the project well underway. Before the meetings, they observed a number of lessons to see if progress were being made. They were discouraged to find that the single experimental teacher was the only one working actively in the humanities model with some of her students. She was the only one who seemed to actually understand what The Experiment was about. The other basic experimental teacher was confused about her responsibilities in The Experiment. The third experimental teacher was clearly hostile to the proposal.

A morning meeting with experimental teachers and teacher aides on the 7th was therefore directed toward generating a more clear definition of reflection and disclosing specific ways to present materials so as to help students learn to reflect. Consultants stressed the definition of reflection as presented early in Chapter One of this report. They presented it as a kind of deep thinking that involves the student's finding self in something read or something done. When presenting a reflective material teachers were supposed to make students aware of how they reacted toward ideas in the materials and to help them discover the nature of that reaction. They were to use the materials to present alternative ways of thinking and doing things. Consultants agreed to send teachers a written summary of dealing with the works in these ways which would include the "steps" in the reflecting endeavors.

Consultants and evaluators saw that much needed to be done to build an experimental spirit as Tussman suggested. Consultants therefore made several suggestions for implementing and keeping this spirit of The Experiment. They recommended first of all that the already experimenting teacher act as a guide in helping the others to get started in The Experiment. They noted that this might foster an even stronger teaching team approach among the experimental personnel as a whole. Secondly, they recommended that experimental teachers, teacher aides, and the coordinator hold weekly meetings as per the proposal. This was not done prior to this December session, however; and consultants believed it to be an essential part of keeping the experimental spirit. These meetings were later known as "experimental meetings." They also suggested holding regular staff meetings at which all teachers and aides could participate as a whole group, undivided by The Experiment. Finally, the consultants suggested that the coordinator engage in teaching a small number of students as soon as possible thus enabling him to more fully share the teachers' experiences and, thereby, to gain firsthand knowledge of experimental endeavors which would equip him to act as leader in the meetings with the experimental group.

At the inservice meeting humanities consultants gave each teacher a series of humanities materials that were mimeographed for distribution to students and they were accompanied by suggested questions and topics upon which students could reflect. These selections, selections from two additional sets of materials, and examples of materials developed by experimental teachers are included in the Appendix to this report. Consultants urged teachers to "try out" these materials with students as soon as possible and to generate a momentum and interest in The Experiment. They planned to return in early February to check The Experiment's progress. The not yet experimenting teachers continued to reveal various assumptions about students developed from their preconceptions about them, but agreed at last to actually begin to experiment.

After these inservice training meetings teachers seemed more eager to use experimental materials and felt they had benefited from their group and individual talks with the humanities consultants. Their views of the consultants were revealed especially at this time, however. It became apparent that the consultants' roles in the program were very unclear to teachers. As yet, they did not view the consultants as helpers or resource persons or advisors, although this was the intended role of the consultants. Instead, teachers, teacher aides, and the coordinator saw them as intruders to the program and not essential to a smoothly running ABE program. In fact, some complained at first that the consultants disrupted the project in their visits, even though without their coming The Experiment might not have really started. A few teachers and teacher aides saw the consultants as "bosses" of some type who had, in their opinions, an undefined authority over them which allowed the consultants to call meetings, observe classes, and make requests of the teachers to engage in experimental activities. Control group personnel, though not involved with them, believed similarly. After these meetings, consultants also developed certain conceptions of themselves that were different from the intended helping notions. Since they perceived that some personnel members defined them as intruders, they began looking at themselves in this way in regard to the Butte project. They also saw themselves, together with the evaluator and evaluation consultants, as action creators in the program because of having to "push" experimental personnel to begin The Experiment. It was originally intended, however, that consultants would be called in to help and advise in an already moving, developing experimental program by this time.

Subsequent to this and other inservice sessions that were held, though, views of the consultants were changing. Teachers began to see them as helpers, resource persons, friends, and not as intruders.

INITIATING WEEKLY EXPERIMENTAL MEETINGS

A few days after the inservice training sessions the coordinator and experimental personnel, including experimental teachers and their teacher aides, agreed to gather together every Thursday morning from 8:45 until 10:00 to hold experimental meetings. The evaluator ordinarily participated in these meetings with the experimental personnel. Their primary goals in initiating this series of meetings were to generate and maintain a spirit of The Experiment and further develop their teaching community. Meetings began on December 9, 1971, and continued throughout the remaining months of the project. They were cancelled on only a few occasions. Teachers used experimental meetings for a variety of purposes pertaining specifically to The Experiment. There were several usual events at each of the meetings.

Ordinary Events at Experimental Meetings

During experimental meetings teachers did a number of things. At most meetings they discussed new materials compiled by the humanities consultants or by the teachers themselves. In doing this they considered their own interpretations of the reflective work in question, possible reactions of their students, the suggested questions and topics for discussion from the materials sent to them by the consultants, and the possible kinds of students who might enjoy particular works. They also worked on ways of dealing with and incorporating the works into their lessons. They discussed "good approaches" and opportune times to discuss reflective materials. They developed different kinds of questions to use with each material.

At experimental meetings teachers shared their experiences in using certain works by discussing materials and techniques which were successes and others which seemed to be failures because they did not elicit good reflective discussions. Teachers presented problems they encountered with particular students and welcomed others' suggestions as to ways of coping with these problems. Though the one initially experimenting teacher served as a helper to the others at first, the teachers all quickly became helpers to each other once they began to experiment and had experienced successes and failures in their attempts.

Experimental personnel were able to discuss numerous changes as a result of The Experiment after they had participated in it for awhile. They talked about changes in students' attitudes toward the experimental materials that were added to their other skill-oriented materials during lessons. They were able to discuss, for example, students' initial reactions and compare them with their current reactions to The Experiment. They talked about differences in students' abilities to reflect and how these abilities seemed to them to develop in dealing with each subsequent reflective work. Teachers discussed with one another changes in their own approaches to reflective materials. They saw themselves as becoming increasingly adept at introducing reflective materials and meeting other experimental aims. They noted, too, at these meetings that they were becoming more reflective and cited examples and occasions to share their observations with others at the meetings. Attending the experimental meetings gave the evaluator many insights into specific areas of development in The Experiment and provided a time for her to add recommendations for the teachers' or coordinator's consideration and to ask them to deal with topics needing clarification for evaluation purposes.

Teachers generally believed that these experimental meetings were helpful to them in dealing with reflective materials and in keeping their efforts directed toward implementing experimental aims. They considered only a few of the meetings as unproductive. The meetings seemed to serve their original purpose, which was to generate and maintain the spirit of The Experiment. Teachers held their experimental meetings until the end of the project, using them for the purposes discussed above.

The Effect of the Experimental Meetings on the Teaching Community

An especially important part of the experimental meetings in maintaining an experimental spirit in the Experiment at Butte was the development of an even stronger teaching community among experimental teachers and teacher aides. In doing this the experimental meetings were very successful. By meeting weekly, the experimental teachers and aides developed an even stronger esprit de corps than before. Routine events at the meetings, such as sharing successes and failures, collectively dealing with problems, and addressing themselves to the changes that they saw in the program, brought them closer together. They acted toward one another as members of a single teaching unit whose teaching responsibilities differed only in having to cope with different kinds of students. This became especially true when the GED teacher, who seemed sometimes hostile to and uninterested in participating in The Experiment, moved from Butte and was replaced by another GED teacher who was eager to try experimenting with reflective materials. Experimental meetings, therefore, did much to strengthen and build up the community of experimental teachers and teacher aides.

In strengthening the experimental teaching community, however, experimental meetings did seem to partially break apart the general teaching community made up of both experimental and control group teachers and teacher aides. At the beginning of the year this general teaching community was already well developed, as described, from their associations with one another during the previous year. Excellent lines of informal communication and their sense of unity were apparent at that time. The general teaching community remained the same until mid-December when experimental teachers actually started to experiment and meet other experimental demands as set forth in the proposal, such as initiating the weekly experimental meetings. Before this time, all of the teachers, except the one experimenting teacher, were objectively engaging in the same kinds of teaching activities developed during Project Homebound.

There were no real distinctions between the two groups except for the additional frustrations of experimental teachers who suffered in trying to cope with their confused notions about The Experiment.

Although experimenting in their lessons and engaging in the weekly experimental meetings were not intended to "set apart" the experimental teachers from control group teachers, these activities did seem to do so to a certain extent. By being together at the office every morning for at least an hour, sometimes working at the same tables, and reserving at least some time during the hour after working with their teacher aides, teachers as a group managed to chat informally with one another about students, materials, or topics unrelated to their teaching as they had always done. They thereby devoted time to maintaining the general teaching community and continued to share experiences and materials not specifically intended to be reflective materials. In meeting alone once every week, however, and in spending time together planning these meetings or informally talking about experimental matters, experimental teachers unintentionally set themselves apart in the eyes of control group personnel. Although both groups believed that "all teachers were still sharing and talking and that the general teaching community still existed," control teachers noticed a division between themselves and the experimental teachers gradually developing.

Control group teachers had several feelings about this division based upon their collective definitions of its nature and the nature of the experimental group itself.

Secrecy. Of primary importance to their ideas about the developing division in the program was their notion of "secrecy." Control group teachers and their teacher aides came to define experimental meetings, especially, and the talks among experimental teachers as essentially secret events about which they were somehow prevented from knowing. To maintain control-experimental distinctions they were, of course, not invited to experimental meetings or inservice training sessions which were intended to prepare experimental teachers to incorporate and deal with reflective materials and experiment aims. Most control group members did not object to this in itself, but felt that more should have been done to keep them at least a little more informed. Total secrecy, they believed, made experimental-control distinctions too apparent. Many did not realize that the secrecy was unintentional.

Being neglected. A few control group members not only objected to the secrecy, but they additionally disliked feeling as though they were being neglected. They felt that they were being excluded from the important parts of the project once the experimental meetings and inservice training sessions began. Some believed that their activities were of no meaning to the Experiment at Butte. Secrecy was another factor in their feeling neglected. Until a meeting was held to inform them of their importance to the program and to The Experiment as a comparison group, they continued to believe that the control group was being overlooked.

The need for a general staff meeting became increasingly apparent as more and more teachers began to share these views of the progressive divisions between the teachers once The Experiment began. Control group ideas about secrecy and being neglected may not have started at all if measures had been taken to insure complete communication and understanding. Staff meetings were held somewhat later, however. They are discussed in the section of this report called "Further Developments."

ADDING REFLECTIVE MATERIALS

According to the preceding account, the experimental portion of the Experiment at Butte began in mid-December following the first inservice training session on December 6 and 7, 1971. Shortly thereafter experimental teachers and teacher aides began to meet regularly at experimental meetings and started to add reflective materials to their ordinary lessons. Following the Christmas break, they engaged in The Experiment, in many cases, with full force. After initial problems, the process of adding reflective materials and meeting other experiment aims was characterized by changes in various background items and by increasingly positive notions about the possibilities of including reflective skills within regular ABE skills during regular lessons. An account of adding reflective materials is included in this section.

Changing Attitudes of Teachers and Students

Teachers met numerous problems when they first began to add reflective materials to students' lessons. Most problems stemmed from the teachers' inexperience with selecting appropriate materials for their students and presenting them in natural ways that would not threaten or put students on the spot. One teacher noted, for example, that a particular reading was not successfully discussed at one of her first experimental lessons. A tense atmosphere developed which made discussion difficult. The teacher, teacher aide, and the students felt frustrated and discouraged. Apparently the less-educated student was able to communicate more easily than the well-educated student making the latter feel inadequate. Later, the same teacher developed techniques of questioning and discussing which took these matters into account. Other teachers had similar experiences. Some had difficulty matching materials to students. Others had problems in interjecting materials at the appropriate places in lessons. Important, however, was that the teachers did make a start and were able to learn from their failures and their successes. Many problems, which were shared among the experimental teachers, were discussed at Experimental meetings and where possible solutions were suggested by other teachers. Teachers eventually added reflective materials and handled them effectively and with increasing facility. Teachers themselves gained confidence in their methods as they developed. Their improvements were noted by observers and students at those lessons as well.

As teachers began to have what they called "really successful reflection discussions" at some of their lessons, they changed their attitudes about a number of preconceptions and misconceptions concerning their students, the program, and themselves. They realized that although they were successful at teaching in other ways, they were also adequately skilled to handle experimental aims, notably reflective thinking endeavors. They became more willing to try out their new skills and discovered that they could still please their students while using their new approaches. They discovered that The Experiment was, in fact, designed to teach reflective skills and block area ABE skills together, without excluding one in favor of the other. They realized that their students still had much time to spend learning math, reading, spelling, speaking English and other ordinary ABE skills. They began to realize that students were free to reject participation in The Experiment by asking to skip the discussion materials in favor of learning something else. No students allowed themselves to be "forced" into experimenting and teachers did not make an attempt to force them. All of these were originally held misconceptions about the nature of the experimental part of the program.

Many of the preconceptions the teachers had about their students were also erased after trying the experimental approach and reflective materials with a number of students they once considered to be unlikely candidates for The Experiment. They saw that foreign-born students at a very basic level of English language skills could handle and profit from reflective skill learning if the materials were presented to them in ways that helped them understand what they were trying to accomplish. The teachers noted, as did their students, that even some of the very goal-oriented students were willing to add reflective materials to their curriculums when they were brought to realize that developing reflective skills might be useful or interesting in their daily lives. Some students, of course, because of their communicative skills were not able to handle the more complicated reflective materials and were not ready to participate in The Experiment using them. In such instances, if teachers tried reflective materials with them, they simplified the materials or engaged in a reflective discussion without using written materials. They discontinued adding reflective materials or reflective discussions if the student's level of understanding was totally inadequate and waited, instead, until they could help the student to develop adequate skills before reintroducing the experimental materials. Teachers were generally encouraged in their new views of students' skills and desires. Most important to them and to The Experiment was their finding that ABE students at varying levels could indeed reflect and deal in differing levels of abstraction. The notion of the kinds of students in The Experiment is further discussed in Chapter Four as are other changes in significant background items.

The importance of teachers' attitudes in The Experiment was discovered to be a crucial factor when introducing reflective materials to students and when trying to develop students' reflective skills in discussions about the materials. The characteristics of the ordinary student-teacher relationships which developed in the program were discussed previously in detail. Teachers and students interacted as friends and routinely took each others' actions or opinions into account. How teachers behaved, therefore, in bringing new materials to the students was vital to the opinions the students were to develop about these materials. If the association between a student and teacher was an especially friendly, caring one, the teacher's ideas were very crucial to the student's acceptance of the material.

Teachers in The Experiment who were successful at reflective endeavors with their students were those whose enthusiasm in dealing with reflective skills was apparent to students through the teachers' action while "doing reflection." Similarly, if a teacher did not enjoy using a particular reflective reading, he often conveyed this to the students by his ways of dealing with the material. "Very often," students said, "we start feeling about it just like the teacher does."

The important effects of varying teacher attitudes toward reflection and reflective materials as revealed in how they presented and dealt with them could not be dismissed by teachers as The Experiment was implemented throughout the year. Their influences were distinctly perceived by teachers, students, and observers alike. Although teachers sometimes were unsure as to whether they were using correct ways of adding reflection skills to a lesson, they became confident that if their attitudes in presenting them were positive they were, at least, moving in the right direction and very likely would be able to elicit a worthwhile reflective discussion.

How Reflective Materials Were Added

How reflective materials were added to lessons changed throughout The Experiment and, of course, varied with students' and teachers' preferences. Teachers learned through experience that it was important to pick a natural time to begin the materials during the lesson and that in doing so they preserved the continuity of the lesson.

The appropriate natural times to introduce reflective materials varied with lessons and students, but teachers discovered that they were often appropriate to introduce at the start of the lesson helping to lead into teaching other block area ABE skills. In doing this lessons often got off to a good start with the student becoming relaxed and interested from the beginning. At other lessons, reflective materials were appropriate to introduce at an interval or diversion during the course of the lesson to break the tension generated by dealing with other skills. Many students welcomed such a break and believed that they were making full use of their time utilizing diversions constructively. Teachers had to pick just the right time to incorporate reflective materials so that lessons would not be entirely disrupted. The teachers intended, instead, to use reflective materials to augment these other skills. Some teachers found that with particular students adding reflective materials at the end of a lesson was most successful. It provided a change of pace and usually an opportunity to use new communicative skills just learned in another part of the lesson during a different learning situation. Individual students and teachers had their own preferences as to their favorite times to begin considering reflective skills. The best times were those which allowed a maximum amount of continuity in the lesson and insured that neither reflective skills nor ABE skills were neglected. If dealing with a particularly talkative group of students, for example, a teacher usually chose to add reflective materials at the end of the lesson instead of at the beginning. If added at the beginning, these students might be inclined to discuss the reflective topics throughout the entire lesson. The times teachers and students chose to deal with the experimental materials were mutually and informally agreed upon.

Selecting the right reflective materials to introduce depended upon the nature of the other parts of the lesson, topics teachers felt comfortable dealing with, and topics which students preferred. Teachers tried whenever possible to maintain lesson continuity while satisfying their own and their students' reflective material preferences. Students often entered into selecting topics or specific materials to use in a lesson and therefore had much to say in choosing vehicles for delivering the curriculum. Teachers usually supplied the array of possible choices which would fit well into the lesson.

At first, teachers had only the selections compiled by the humanities consultants. Later, as the momentum and enthusiasm in The Experiment developed and when teachers themselves knew more about the nature of developing reflective skills, they developed their own materials with particular kinds of students in mind using the original materials as guidelines. They thereby were able to adapt The Experiment to meet specific needs of students and to deal with particular problems.

Materials used were those in which the students expressed an interest. Some students, for example, especially liked reading selections written by various philosophers, such as Plato. Several selections by Plato were therefore included in their lessons throughout the year. Other students preferred to read the works of more modern authors. Teachers complied by devising such selections or picking that type of work from the list of works developed by the consultants. Many students in the program were interested in government and politics. They enjoyed reading both contemporary and ancient works dealing with various political topics.

It was important for teachers to select just the right kind of work for the students to read and to make sure that it was not beyond each individual student's reading level. For very basic students or students considered slow learners teachers usually chose simple works which were both short and concise. Often, a single sentence expressing the desired idea for consideration was useful. Other faster students who were able to cope with more complex materials read longer, more difficult selections. Several students, for instance, found great satisfaction reading Plato's Apology. After working with their experimental students for awhile, teachers were able to choose selections quite carefully for each person knowing that the student would probably enjoy whatever material was selected. In most cases, however, students themselves played an important role in picking the materials for their lessons. Later in the year, in fact, several students who were especially interested in The Experiment developed some of their own reflective materials. In doing this they used various books in their own homes, such as poetry anthologies, books of quotations, and short story collections. In some instances, their teachers were able to use these reflective materials with other students. Instances like these were clear examples of teachers and students casting aside their teacher-student roles and participating as fellow learners instead.

By the end of the year teachers had a wide variety of selections from which to choose. Materials compiled by the humanities consultants, the teachers, and some selections developed by students were kept on file and were available to all experimental teachers. Examples of reflective materials used are included in the Appendix to this report.

Specific procedures used in presenting a particular reflective work changed as teachers' knowledge of a variety of methods grew and developed. Generally, the most successful approach was to begin by reading the material. If students were adequately skilled, teachers asked them to read it silently. If not, teachers read the work aloud. Next, teachers picked words from the context that they felt might be new words to the students and discussed the definitions of each word. Students then added any other words from the context with which they were unfamiliar. Once word meanings were established, teachers and students usually reread the material silently or aloud depending upon the particular student and the teachers' judgments. Teachers then asked students to state their initial impressions of the work and their interpretations of it. Together, teachers and students discussed these interpretations and impressions in ways that would show to the student his own presuppositions, possible sources for them, and alternative possible ways of thinking about the issues under consideration. The suggested questions included with the selections contributed by humanities consultants were sometimes used in doing this. If necessary, depending upon the topics of the materials, teachers presented background or historical information about the topic or the author of the work before having students read the material. This gave students the necessary perspective to deal with the material in question. Teachers and students agreed that making the presentation as fun and as nonthreatening as possible was important to a good discussion about the topic and related areas. Preceding the reflective materials with a friendly chat and carrying this tone into the discussion about the material was a way of doing this.

Individual experimental teachers had their own variations on the presentation method just discussed. Teachers varied their methods in order to accommodate their own abilities and preferences and those of their students. GED students did not require such preparation as going over all vocabulary words in most selections and did not have to have their teachers read the materials first. On the other hand, basic students required more assistance in dealing with materials. It was important for teachers to provide methodical assistance to meet these students' needs. Without it, the students felt pressured and incompetent. With the kinds of assistance mentioned, most students were brought to deal successfully with each item selected for them by their teachers.

Integrating reflective materials with skill materials was an area in which teachers had difficulty adding reflective materials. Since they felt that reflective works should be presented at a natural point during the lesson and that they should strive for continuity in the lesson, teachers believed that they should link reflective materials to the parts of the lesson devoted to other skill learning. For students learning basic skills this would be particularly beneficial. To students learning English as a second language, for example, teachers presented new grammar material. After it was introduced, students practiced what they learned in a formal drill exercise which was then followed by conversation. In this conversation teachers ordinarily directed questions and statements to students to encourage them to use the newly learned grammar materials. This was usually followed by a short selection for the students to read which had in it the grammatical items presented. The students could then learn to incorporate all of the skills learned into conversation and dialogue. Teachers agreed that following such a pattern did help most students to learn and use these kinds of skills. However, when teachers presented reflective materials immediately after lessons devoted to core ABE skills, the sequential pattern of teaching skills was not followed. Lesson continuity was broken.

Learning continuity continued to be a goal of experimental teachers in trying to develop better ways of integrating reflective skills and basic ABE core skills. Toward the end of the year they developed ways of doing this at least partially. Going from one skill area to reflective skills using their new approach seemed to be less disruptive and a way of getting into reflective matters quite naturally. To do so, they presented core skills to students through drills and conversation, and then often used a suitable reflective material which either incorporated the skill in its text or demanded the use of the newly acquired skill in discussions of its topic. For example, if a student were learning about reflexive pronouns, the teacher might select a humanities material in which reflexive pronouns were used. In the reflective discussions following the presentation of the material, the teacher posed questions which required the student to use reflexive pronouns in his answer. Using such an approach was found to be a possible way to integrate the two kinds of skills in lessons and was enjoyable and challenging to students as well. Students often commented that they preferred using the reflective materials to using workbooks even in learning core ABE skills because they considered the reflective materials "a challenging change of pace" and a "chance to be exposed to the materials used in liberal education."

Developing a Fellow Learning Approach

In participating in The Experiment by developing students' reflective skills together with his ABE core skills and by trying to implement other specified aims, teachers engaged in developing new ways of teaching and learning. As The Experiment proceeded, the approach stressed was one that might be called a "fellow learning" approach. Teachers and students who engaged in this approach were forced to put traditional teacher and student roles partially to the side. Teachers did not act as "tellers" when presenting materials. Students did not have to act as if they were "receptacles of information." Instead, the association between experimental teachers and students was one of fellow learners in which all participants both taught and learned. In discussing experimental materials, for example, neither teachers nor students presented themselves as experts. They interacted, on the other hand, as fellow explorers. In discussions, teachers worked to encourage students to express their ideas by channeling their talk and making statements which they thought might elicit pertinent student responses. They dealt with students' ideas as important contributions to lessons. They encouraged students to become "teachers" in discussing and explaining their contributions to fellow students or to the teacher. By doing this, teachers hoped that students would learn by teaching and sharing and exploring.

This approach to teaching and learning was especially applicable to dealing with reflective materials and learning and using reflective skills. Experimental teachers did carry it to other parts of lessons where they might have ordinarily used a more conventional approach. Letting students discover for themselves the bases for rules in math or grammar, for example, instead of telling the student what he needed to know about them approximated this approach to a degree. Materials which could be discussed in any way were appropriate for the fellow learning method.

The adultness of an ABE student was a major presupposition of the fellow learning approach. Interacting as fellow learners while teaching and learning demanded that students and teachers draw out and build upon each other's adult life experiences for points of reference. They assumed that each had an important contribution to make on the bases of these. In using reflective skills, teachers and students' life experiences especially came into importance. They were forced while considering the reflective materials to draw out and deal with these adult life experiences. Doing so was essential to reflection and made for exciting, interesting discussions.

Regarding the project aims directed toward developing new kinds of interaction between teachers and students, the approach in which they interacted as fellow learners in exploring materials together was vital. In doing this, teachers and students became successful in meeting such project aims. For example, neither teacher nor student was the focus of attention. Students as fellow learners and helpers did not compete against one another. Instead, each student tried to bring other students to an understanding of concepts explored during lessons. Certain groups of students meeting with a teacher expressed a curiosity about what the teacher's other groups were doing, however, and wanted to do as much or more than the other groups. Within a group, cooperation rather than competition was developed. Teachers became leaders rather than teachers and were able to foster a team spirit within their groups. Students were very able to detect these changes in interaction during their lessons. They perceived even small differences and noted how their teachers shaped the interaction to make everyone at a lesson seem to be learning together. Many students seemed to be especially surprised at and pleased with the discovery that their teachers were learning from them and their experiences as well. Many students anticipated only that teachers would be teaching them instead of learning from them as well.

This discussion was directed toward describing how experimental teachers added reflective materials to students' lessons and how they shaped the interaction of lessons in order to develop a student's reflective skills. For the most part, doing so was a deliberate and planned endeavor at each lesson. A description of the fellow learning approach explored the ways in which teaching and learning was generally handled and it illustrated how teachers were able to work toward achieving experiment aims. While experimental teachers were doing these things at their lessons, control group teachers were working with their students in ways similar to those developed during Project Homebound. A discussion of these encounters with reference to experiment aims and students' reflecting follows.

A Comparison between Experimental and Control Groups

Teachers in the control group met with and taught their students as they did in Project Homebound. They met with individual students or with groups of students in homes or centers. Teachers and students developed associations with one another characterized by informality, friendship, care, and trust as described in Chapter One. Like experimental teachers, control group teachers worked through this relationship to accomplish their teaching. Both groups used the ordinary ABE workbooks, which had been found to be most useful during Homebound, in teaching the ABE curriculum developed around the block areas of instruction: basic computational skills; basic communicative skills including reading, writing, and speaking English; and computational and communicative skills at the GED level. All teachers also designed and used materials on their own to further help them to teach these ABE skills. To their other materials they added samples of literature not in workbooks, movies, newspapers, recipe books, drivers' license manuals, and maps in order to meet the needs of individual students and make lessons more interesting to adults. Experimental teachers, however, added humanities and other reflective materials to their lessons and handled them in ways designed to develop reflective skills specifically. They also incorporated other materials which they developed themselves and used them in ways similar to those employed by control group teachers. Control group teachers were requested to work primarily with teaching ABE skills, not reflective skills, for comparison purposes. It is important to note again that both groups of teachers were "experimental" in the sense that their approaches to teaching were innovative and informal because of their common participation in Project Homebound.

Established during the Experiment at Butte was the fact that ABE students at even basic levels of skill proficiency could, in fact, reflect, using the definition of reflection presented at the start of Chapter One. Some students who could not communicate with their teachers at first were probably the only students who could not deal with reflective ideas in English, but could do so in their native languages. As their skills in English increased, however, these very basic students were able to handle reflective materials and ideas if presented simply and if the teacher artfully handled interaction about the topics in encouraging and non-threatening ways.

Although teachers in both groups noted that their students were thoughtful and asked abstract questions during lessons, data suggested that developing truly reflective skills in students required a teacher to draw out the student and deliberately shape the interaction at a lesson before reflection would actually occur. That is, although many students ordinarily questioned ideas at lessons or seemed particularly thoughtful, in general they did not on their own go beyond intepreting or questioning an idea by exposing their own presuppositions, discovering the bases for those presuppositions, or by suggesting alternative possible ways of thinking about or acting toward the idea, all of which are important parts of reflecting. For students to accomplish these latter phases of reflective thinking, teachers were necessary in order to guide or channel the students' thought and discussion to "push" the student to use his reflective skills. As students encountered this and gained practice at reflecting, theywere gradually able to develop their reflective skills. Some students toward the end of The Experiment began to reflect on their own, although others still needed their teacher's guiding in order to do so. There were a few students who were normally thoughtful and reflective persons who naturally reflected during lessons. These students were exceptions. Other students needed to work to develop their reflective skills.

Adding reflective materials to lessons was intended to make the teachers' job of developing the students' reflective skills an easier one since the materials were specifically adult-oriented to appeal to ABE students' interests. Although teachers could help students reflect by presenting ideas orally, their reading of a short selection or single sentence often facilitated reflection by providing a common point of interest, a way of integrating ABE skills with reflective skills, and a way to "get into" dealing with the reflective part of a lesson naturally. Experimental teachers could then deal with the ideas presented in these materials in specific ways that brought the student to reflect, attempting to go beyond the context of the materials and ideas presented therein. Teachers in the control group often added to their students' lessons materials similar to the humanities materials developed by the consultants or by the experimental teachers to help the students think about certain topics or to expose them to different literary forms. In most cases they did not, however, "push" their students to reflect beyond interpreting the materials in various ways that were related to the context of the specific topic. They dealt with the works primarily as pieces of literature, rather than as vehicles for reflective thinking. In these instances, they used the materials extremely well as innovative ways to develop ABE skills, especially communicative skills, at both the basic and GED levels. Methods of handling essentially reflective materials therefore differed somewhat between the experimental and control groups.

Although members of the control group were required to use their Homebound teaching approaches, on numerous occasions control group teachers did strive to meet experiment aims. They were curious and they, too, were basically innovative teachers who wanted to "try out" a different approach, a variation of their own approaches. For example, they often let their students engage in selecting the vehicles for delivering their ABE curriculum and deliberately fostered a greater fellow learning approach which incorporated most of the experimental aims pertaining to interaction between teachers and students. Many said that they did so with much success. Like the experimental students, their students were able to see these changes whenever they occurred and seemed to be very much in favor of them. Control group teachers did not try to meet experiment aims consistently and deliberately throughout the entire year, but they discovered that they naturally did so because desired experiment ways of teaching and interacting were so close to their own methods of teaching and acting. One teacher noted:

> The line is so fine that I find myself slipping into and out of a teaching method like that recommended for experimental teachers. It's really a variation of the Homebound approach, but in the Homebound approach teachers acted more directly as teachers, not fellow students.

In summary, comparing the teaching and learning that developed in the experimental and control groups, it must be noted that in trying to meet interactional experiment aims, the groups were not distinctly divided. That is, control group members strove to meet some of the aims at least part of the time and did so successfully as evidenced in their own and many of their students' opinions. ABE students were discovered to be able to reflect and sometimes to initiate discussions leading toward reflection, but developing their capabilities to do so in greater depth required teachers' deliberate intervention and direction as was done in experimental group lessons. Both groups used innovative materials, but dealt with them in different ways. Control group teachers handled them as thoughtful pieces of literature while experimental teachers used them principally as vehicles to stimulate reflective thinking.

The Importance of Additional Inservice Training Meetings

As planned, the consultants returned to Butte on February 9-11, 1972, to observe lessons of both experimental and control group teachers and to hold inservice training sessions for experimental teachers and teacher aides. Their purpose in attending lessons was to observe the progress made by the experimental teachers and students in using reflective materials and to learn more about the nature of control group lessons. From observing experimental lessons, consultants learned how and to what extent reflective materials were being used. They were able to gather suggestions for the types of reflective materials that they needed to develop for different kinds of students. Some selections, they learned, were too difficult for the more basic students. For these students more simplified materials were necessary.

The inservice training session held on February 10, 1972, was designed to augment teachers' knowledge gained at other sessions and at lessons in which they used experimental materials and methods. At this meeting teachers shared their teaching experiences, related instances of their successes and failures in using reflective materials, discussed adult education goals in general, and asked consultants questions concerning ways of dealing with reflective materials. Consultants gave teachers the opportunity to bring into this session any problems or issues they believed to be most important to their coping with The Experiment and responded to these needs. Besides this session consultants met individually with teachers, teacher aides, and administrators to further explore with them issues raised during the inservice session.

On April 24 and 25, 1972, other inservice training meetings were held. At these, consultants met with individual teachers and teacher aides in The Experiment instead of scheduling a general meeting. Teachers asked questions pertaining to particular students and their attempts at using reflective materials with them. Consultants advised teachers about the ways of handling problematic circumstances and methods of coping with their own personal problems in dealing with The Experiment. Teachers, for example, wanted to know how to elicit more response from very shy, quiet students, how to pick topics of interest for persons with certain kinds of backgrounds, or how to ask probing questions. Consultants also observed group experimental lessons to check progress and to participate in the discussions at the teachers' requests.

Inservice training sessions like these which were held once The Experiment was actually underway were essential in that they added momentum to experimental endeavors and further encouraged experimental teachers about the work they were doing. Teachers viewed them as attempts to build up their enthusiasm and confidence, keep them on the right track, answer their questions, and clear up particular problems which needed answers before more progress could be made. In this sense, they still saw the humanities consultants as initiators of action but began to consider them as helpers and advisors as well, which was the consultants' originally intended role in The Experiment. Consultants no longer felt that they were intruders. Following these inservice meetings, teachers had renewed interest and more confidence to engage in The Experiment. They seemed better informed as to the nature of the Tussman philosophy and how to implement it in their own teaching and learning experiences. Inservice sessions were essential to the life of The Experiment and to a further refinement of experimental teaching methods and materials.

Summary

This section has dealt with the concept of adding reflective materials to students' lessons once The Experiment actually began. Changes in the views of teachers and students were explored, especially in relation to discarding misunderstandings and certain preconceptions. Ways of actually adding reflective materials were described, pointing out the times when doing so was appropriate, how it was accomplished, and the importance of the teachers' fellow learning approach to teaching and learning. In addition, a comparison of important traits in control group and experimental group lessons with regard to reflection and reflective materials was included to show the observed differences of each. Finally, inservice training sessions held once The Experiment actually began were shown to be worthwhile and essential additions to the continuity of The Experiment and the experimental approach. Other developments in the program are described in the following sections of this chapter.

FURTHER DEVELOPMENTS

Staff Meetings

By January, numerous problems developed in the program and demanded teachers' and administrators' attentions. Foremost was the need for a general staff meeting which many teachers had been requesting since

December when The Experiment really began. At the end of January, the coordinator scheduled a general meeting for all members of both educational groups to discuss misunderstandings, the growing divisions between the control and experimental groups and possible solutions for them, the consultants' visits, and other matters of concern to the teachers. From this meeting, teachers generated a better understanding of each other's duties and had a chance to vent complaints. Misunderstandings still existed, but communication lines were opened more fully. Teachers recommended regular meetings of this nature. Several weeks later, another general staff meeting was held at the request of the evaluator and evaluation consultants. At this meeting, the roles of the evaluator, humanities consultants, and evaluation consultants were fully explained to teachers who had questions or misunderstandings about them. The project aims and design were discussed to explain again the need for and importance of both the experimental and control groups. Teachers were requested to reread the project proposal, which some had never had a chance to read, in order to clarify notions about the project and its participants.

In the months following, only a few other staff meetings were held. Though they were not regularly scheduled events, staff meetings became necessary whenever tensions within and among groups developed and when misunderstandings arose. The meetings kept channels of communication open when they were held and provided vents for stating opinions, problems, and criticisms. In general, in teachers' opinions, more meetings should have been held at regular intervals to avoid the build-up of problems which occurred and, in the end, made the few meetings that were held so necessary.

Replacing an Experimental Teacher

In January, project personnel learned that the experimental GED teacher Pat Cork was leaving the program because of having to move away from Butte with her husband. Immediately, the administrators began to look for a replacement, but were unable to hire anyone until April when Lynn Hinch joined The Experiment. In the meantime, once the teacher left in mid-February, her students were left without a new teacher. This provided the opportunity for the project coordinator to teach a number of students as the consultants recommended at the December inservice training meetings. The coordinator and the former teacher's aide, Dulcie Allen, therefore divided the students between them in order to continue the students' GED curriculums. Neither worked with experimental reflective materials, however, with these students during the time that they taught them, which discontinued the participation of GED students in The Experiment until the new teacher arrived. Though the students developed close associations with their original teacher, they did not seem to object to their having to change teachers several times. They adjusted immediately to the new, permanent GED teacher when she began to teach them. The part of their curriculum which did suffer, however, was the experimental part. They were not exposed to reflective materials for nearly two months, which disrupted their interest in and slowed their progress in developing their reflective skills. Many had the feeling, for example, that they were "beginning all over again" in using reflective materials. Others, with whom the original experimental GED teacher did not try to use reflective materials, started to engage in reflection during lessons for the first time when the new teacher came. Many particularly enjoyed this experience and wondered why they had not done this in lessons previously.

Changing teachers illustrated several important things in the program. It showed that students would not be overly upset at having to change teachers. It provided a time when the coordinator could teach several students, although he did not use reflective materials during lessons. Additionally, it illustrated that certain GED students, once believed to be unlikely experiment prospects because of their interests or goals, actually enjoyed and felt that they benefited from participating in The Experiment and working with reflective materials to develop their reflective skills. This provided data which were crucial to this evaluation in that it reaffirmed notions about the mistakes a teacher might make in terms of The Experiment by holding preconceptions about students, defining expectations for students according to ABE skills only, and thereby excluding the student from learning reflective skills without even letting him try out this phase of the program. Also illustrated was the importance of the teacher's attitude in bringing reflective materials to students. While the first teacher in bringing reflective materials conveyed to students a doubtfulness about the worth of learning reflective skills and about using the materials themselves, the new teacher approached learning reflective skills with enthusiasm and encouragement. Students reported as a result that they "liked doing those kinds of lessons (reflective skill learning) more with their new teacher than with their first teacher." They noted that their new teacher liked talking about the reflective materials much more and that this helped in their (the students) developing more positive, enthusiastic feelings toward the materials as well. Though the change in teachers disrupted the continuity of the program and interrupted these students' ABE skill and reflective skill curriculums, it provided a learning experience of great value to personnel in the Experiment at Butte.

Field Trips

Other important events in the program were field trips and other occasions arranged by teachers of both groups in the Experiment at Butte. Field trips were intended to be important parts in the program as the project proposal indicated. Field trips were supposed to be ways of helping students grasp some basic problems in their community and of achieving a greater understanding of their place within it. Field trips were made to meet the practical needs of students to help them cope with everyday matters. Although funds for field trips were significantly reduced when budget cuts from the original proposal were made, some teachers still included field trips as part of their students' curriculums. They arranged trips with groups of students to the Butte Public Library, the Court House, to banks, to Montana Tech for the *Civilization* film series, and elsewhere. One group of students accompanied their teacher to watch the proceedings of the Montana Constitutional Convention in Helena, Montana, where they also saw the capitol building, state museums, and art galleries. Students and teachers planned field trips together. Locations for trips were determined according to students' interests and needs. Mostly, groups of students participated in field trips. However, where students went to banks to arrange checking or savings accounts or to insurance offices to secure insurance policies they alone were accompanied by their teachers to insure their personal privacy. At the end of the year, all of the teachers arranged a field trip-picnic to the Columbia Gardens, a recreational area in Butte. All students and their families were invited to attend the gathering at which two Constitutional Convention delegates from Silver Bow County spoke informally with the students about the proposed constitution.

Both students and teachers who participated in field trips felt that they were worthwhile additions to their learning. Many students were enthusiastic about them because they found that they gained knowledge which would be useful to them in their everyday lives. Additionally, students felt that going on field trips gave them a chance to play an active part in the activities of their educational group and kept them involved in their learning activities. Although they lacked funds, program participants who went on field trips felt that they were successful additions to the Experiment at Butte.

Dropouts

During the Experiment at Butte, most students were active, regular participants in the program. There were, as project personnel anticipated, a number of students who quit the program for various reasons prior to the end of the program or before they reached their stated academic goals and were labeled "dropouts." By the beginning of May, 48 students became dropouts. Of these, 33 per cent were basic team students and 67 per cent were GED students, according to the ways they were originally classified.

Reasons for dropping varied as did times when they quit. There were several students at the beginning who quit without having any lessons or contact with their teachers at all. They did not quit, therefore, because of displeasure with the program. Instead, they formally terminated because of joining other adult education programs, being sick, being busy with children or occupations, or deciding that they simply were not interested. A few of these students said that they were fearful about participating and wanted to "wait" before joining again. Other students dropped out after one, two, or several months of instruction. The reasons were also numerous, but were centered about becoming too busy with other activities, such as child-rearing or jobs, not being interested in lessons anymore, joining other programs, or becoming ill. Some students quit the program temporarily, but stressed that they wanted to begin again once reasons for terminating were eliminated. At least nine students terminated their studies because of having to move from Butte. Two students quit because of personality conflicts with their teachers, whom they felt did not devote enough time to them. GED students, in particular, often quit because they found their lessons uninteresting and either too fast or too slow in terms of how much they were trying to accomplish in their lessons. Some students, for instance, thought that the GED program was not streamlined enough. They wanted to be taught what was on the GED test only. On the other hand, some GED students felt that their teachers and fellow students were moving through materials too rapidly. They said that they would have welcomed more diversions and seemed to like the concept of The Experiment when it was explained to them during interview conversations. Many felt that using reflective materials might have helped them to stay in. Not all GED students were therefore suited for the same kinds of GED programs. Some students dropped the program because they were not confident of their own abilities. Rather than continue, they terminated their studies. An important point to note was that not one student dropped out because of The Experiment or because of using reflective materials. Instead, these students were among the most interested and involved in the program.

In general, then, students seemed to drop out of the program because of their own personal reasons, such as illness or business, rather than because of particular features of the program. Some simply did not feel that they could continue to take time to learn or study and seemed to think their reasons for joining an ABE program were less important than the other areas of their daily lives which demanded their attention. A few students dropped in order to transfer to GED programs other than the Experiment at Butte. Many chose to participate in the Butte MDTA program. Their reasons for transferring especially involved wanting to join friends who were already enrolled in those other programs. Some students did drop out because of features of the program. Only two disliked their teachers and did not know how to switch to other teachers. Others who were displeased with going too slowly felt that they might have liked a faster kind of program. Likewise, those who disliked being in streamlined groups would have enjoyed being switched to another kind of group, possibly an experimental group. A few students wanted to go to lessons outside of their homes in order to escape conditions which they believed were not conducive to learning. Although some of their teachers mentioned that they might be grouped, a few of them were never brought into groups in other homes or at the neighborhood centers. As a result, they terminated their participation in the program because of having lessons in their own homes.

Once students dropped the program, their teachers or teacher aides contacted them routinely for follow-up purposes to try to reintegrate them into the program. Students, often not wanting to hurt their teachers, stated nonspecific reasons for quitting if they were actually quitting because of features in the program. They were more specific in their reasons only if personal problems were involved. A few students rejoined the program as a result of the follow-up contacts, but many students' minds were made up by that time.

Teachers and administrators had to contend with dropout problems and ways to keep potential dropout students interested in the program throughout the year. It appears that basic students were less likely to drop because of their dependence upon teachers and their need to know very basic skills. GED students, on the other hand, were more independent and self-sufficient in terms of skills. To keep these students interested it was useful to involve them in the program as much as possible and make it as interesting and as challenging as they could. For many GED students, the addition of reflective materials seemed to serve this purpose. Some who felt that the GED curriculum was "dry" believed that working on reflective skills made them enjoy their learning.

PHASE THREE: ENDING THE EXPERIMENT

On the morning of May 3, 1972, the evaluator and evaluation consultants held a three-hour seminar with teachers, teacher aides, and project administrators to discuss topics pertaining to the project, including teacher-student relationships, the ABE curriculum and materials used, the GED test, the teachers' evaluations of students, setting up a similar program, and suggestions for inservice and preservice training programs, among others. The meeting was intended to provide evaluators with additional data about the topics mentioned and afford them the opportunity to recommend that teachers undertake several activities while the program was in its "winding-down" phase. At the meeting, teachers were requested to pay attention to the ways in which students might be kept in the program until the end instead of dropping once the end was near; to plan to give the follow-up diagnostic tests to suitable students; and to write individual evaluation sheets for each student which were useful in the evaluation of the project and would be worthwhile inclusions in each student's file. These individual evaluations were described in Chapter One.

In addition to "wrap-up" classes and meetings where teachers worked to keep students interested, the final phase of the Experiment at Butte was therefore characterized by giving follow-up tests, writing individual evaluation sheets, administering GED tests, and making plans for the possible program next year.

Wrap-Up Lessons and Keeping Students Involved

Teachers tried to maintain continuity in their lessons until the very end of the project in order to avoid having students concentrate prematurely on ending their lessons. Teachers wanted their students to have as much instruction time as possible. As a result, most "wrap-up" lessons proceeded generally as other classes throughout the year. Experimental teachers continued to try new materials which they developed for particular students while concentrating on teaching ABE skills as well. Control group teachers strove to devote even more concentrated efforts than before to meet the basic or GED skill needs of students. The temporary nature of the program figured importantly in these activities and changed them somewhat. Neither students nor teachers knew for sure whether their meetings would continue the following year. If not, they realized a need to accomplish as much as possible during the last few weeks of the program. Both teachers and students remarked that they were under greater pressure as a result.

Keeping students involved. At the same time, some students who were ordinarily very enthused about their lessons threatened to quit toward the end of May. Warm weather, recreational activities, gardening, and other activities seemed to draw their attentions away from their lessons. In order to keep these students from quitting prematurely, teachers tried to make students more accountable to the program. They often did so very successfully by involving them still further in the program by showing them the project proposal and discussing it with them; letting them have a greater role in selecting materials and movies to use in their lessons; developing "special attractions" in lessons, such as discussing topics of particular interest to students that were not included before or topics that pertained to summertime activities. Other means for maintaining student interest were field trips of various kinds and the picnic for all teachers and students at the end, which were already mentioned.

Most of these methods were successful until primary and secondary schools closed for the summer. Many students with school children expressed a desire to end their lessons then. Additionally, some others were planning vacations and asked to terminate their studies shortly before them.

During "wrap-up" lessons, students commonly asked about their being in the Experiment at Butte the following year. Teachers were forced to tell them that the possibilities were uncertain, but promised them that they would be contacted if lessons were available. Lists of interested students were compiled.

Testing. GED tests and follow-up diagnostic tests occupied a part of many "wrap-up" classes. Students throughout the year took the GED test. Directly before it their lessons were involved with specific test concerns and quick reviews. "Wrap-up" lessons at the end of the year were similar. Students often posed elaborate excuses about why they should avoid taking the GED test until a later date. Not feeling prepared, not wanting to end the teacher-student association, and not knowing what they were going to do after the test were their reasons for wanting to postpone taking the test. Teachers had to deal with these matters in their lessons at the end of the year and tried to work through their association with students to encourage them to take the test.

As at the start of the program, teachers used their discretion about giving follow-up tests to their students. It was stressed that tests were to be used for their own information. If they thought that comparing test scores would be beneficial to their subjective evaluations of the student, or if they thought a student might be interested in the results of such tests, they administered the Student Survey Test or their own informal diagnostic tests, such as the phono-visual test described previously. Therefore, not all students were tested. Many teachers felt that their final encounters with students were better spent as ordinary teaching and learning occasions. Students who were going to take the GED test or who had done so already were generally not given any additional tests. Since experimental teachers combined reflective skill teaching with ordinary ABE skill teaching without excluding or distracting from the latter, they believed that tests would not be useful to compare the ABE skill learning of their students with skill learning of control group students. Both groups had included adequate ABE skill materials. Also, the basic students in the control group were not given standardized tests at the beginning, although they were tested informally. Comparing control-experimental results would not even be possible in this case.

At the end of the program, then, some lessons were devoted to formal testing while others continued to carry on lessons as before. Teachers used their discretion as to how to handle testing activities.

Final Evaluation Meeting

On June 2, 1972, the evaluator conducted a final evaluation meeting in order to inform teachers, administrators, and state and federal program supervisors of the contents of the final report and major outcomes and recommendations of evaluation research. Time was provided for comments and questions pertaining to topics included in it. All project personnel were to receive a copy of the report in its final form.

A CHAPTER SUMMARY

This chapter was an account of the major events in the Experiment at Butte from the time The Experiment actually began in December, 1971, until the project ended in June, 1972. It included and described major program events, such as inservice training sessions, experimental meetings, changes as a result of The Experiment, the methods and problems of adding reflective materials, developments in the association between teachers and students, comparisons between experimental and control groups, and other topics.

Chapters Four and Five are intended to summarize and augment information already presented by treating certain major events as outcomes of The Experiment and drawing from them recommendations and suggestions for future programs based on the Experiment at Butte.

Chapter 4

OUTCOMES OF THE EXPERIMENT

INTRODUCTION

In Chapters Two and Three the major events in the history of the Experiment at Butte were presented and described. This chapter attempts to summarize and augment some of these events by explaining their importance as specific outcomes of The Experiment. The crucial effects of The Experiment on numerous background items are demonstrated. This discussion is followed by definitive suggestions for using reflective materials based upon what experiment participants learned during their involvement in the Experiment at Butte.

IMPORTANT CHANGES IN BACKGROUND ITEMS

The Experiment at Butte had far reaching effects on many aspects of the program. Most important were the changes brought about by The Experiment in some of the things discussed before as background items or characteristics of the program prior to the actual start of The Experiment. Major areas in which its effects were noticed were changes in the misconceptions and many preconceptions of program participants, in the teacher-student associations, in the relationships between personnel, and changes in teachers themselves. Importantly, a new typology of students became clear as The Experiment developed and, with it, were new ideas as to the kinds of reflection in which students engaged.

Changes in Preconceptions and Misconceptions

At the start of the project during preservice training sessions program personnel mentioned serious doubts about various facets of the experimental program. Among them were doubts as to the transferability of the Tussman approach from a college curriculum to an ABE curriculum, the ability and desire of both basic and GED students to deal with, understand, benefit from, and accept the addition of the so-called reflective materials, and the teachers' abilities to incorporate and present these new materials. Some teachers had doubts as to the value of the Tussman philosophy in adult basic education. That is, they were not convinced about the importance of combining the development of a student's reflective skills with the development of his ABE skills. Misunderstandings as to the nature of reflection and specific experimental goals were frequent. These and other preconceptions and misconceptions were changed substantially as a result of The Experiment and what it illustrated to those who were involved in it.

Perhaps the most significant outcome of the Experiment at Butte was that it demonstrated that ABE students were, in fact, capable of dealing with abstract materials and were able to engage in reflection about themselves, their lives, their ideas, and the ideas of others. All of the experimental teachers had at least modest success in working with the reflective materials. Many basic students whose communication skills were limited showed an ability to work with these materials and an enjoyment in doing so. They did not feel that their educational interests were being compromised. Instead, they often believed that their education was being broadened and improved. Many GED students felt similarly. Though there were some who wanted their lessons to include only ABE core skills as teachers expected originally, many others welcomed the inclusion of reflective skill learning and believed that it made their educational experience more worthwhile. Some thought that their GED certification would be more meaningful as a result. ABE students, therefore, could understand and cope with reflective materials and seemed to enjoy that kind of experience in their lessons. The claim often made that ABE students are not willing and are incapable of dealing with abstract reflective materials is false in terms of what was demonstrated in the Experiment at Butte.

A second important misconception which The Experiment erased was that the Tussman philosophy could not be incorporated into an ABE program. Although the experimental part of the program did not gain momentum until later in the year, experimental group members were able to implement the Tussman model in their lessons with many of their basic and GED students. They gradually developed ways of combining reflective skill learning with ABE skill learning in lessons adapted to various kinds of ABE students. If allowed to continue in a subsequent program, their techniques of adapting the Tussman model to their ABE curriculums might become even more refined. To implement, the Tussman model did not require a college setting or college level students. It fit well into an ABE program, if adapted.

Teachers' preconceived notions about their inabilities to deal with reflective materials were refuted. Once teachers came to a better understanding of reflection and their roles in dealing with reflective materials through the inservice training meetings and through their own trials and errors with students, they discovered that they were quite capable of handling experimental materials. With even the short amount of time for practice in refining their techniques, several of the experimental teachers developed great skill in dealing with the humanities. By the end of the school year, some were able to present reflective materials to students in a fairly sophisticated manner.

Though a few project personnel were not convinced as to the value of the Tussman philosophy in ABE, the responses, enthusiasm, and apparent needs of students illustrated its value. This notion is included in a part of this chapter entitled, "Changes in Students."

Many preconceptions and misunderstandings common at the start of the program were eventually changed by the time the Experiment at Butte came to an end. The most important were listed here. Again, the most crucial preconception to be refuted was the general idea that ABE students simply were not likely candidates for The Experiment because of their inabilities or unwillingness to engage in reflective thinking and use reflective materials. Of course, there were some students who were in favor of learning ordinary ABE skills only and refused to include reflective materials, but these students were not the majority. Students who valued and enjoyed working with reflective skills together with ABE skills were found more often. Once they had really tried The Experiment, experimental teachers were forced to redefine the kinds of students suitable for The Experiment. No longer could basic or GED students be considered unlikely candidates without teachers first trying The Experiment and becoming comfortable at doing so with them.

The dangers of preconceptions and misunderstandings were revealed, too, as The Experiment unfolded. Their impact was great in preventing personnel from actively experimenting by using reflective materials even after experimental members were chosen. Experimental teachers, who were convinced from the outset that they and their students were incapable of engaging in reflection and that their students were probably unwilling to do so, for example, delayed the actual start of The Experiment. Once they did begin to experiment, their participation was more limited throughout. They chose fewer students to include in The Experiment, used fewer reflective materials, and did not incorporate reflective thinking into lessons as often as teachers who were more enthusiastic about The Experiment and were originally not as bound by the preconceptions and misconceptions held by many project personnel. This was mentioned in Chapter Three. Preconceptions about students led some teachers to define expectations for their students without consulting the students themselves as to their actual likes, dislikes, interests, and goals. By doing this, an experimental teacher sometimes excluded a person from being considered as an experimental student without "trying out" The Experiment with that student. Data point out that this was the case in several instances. That is, students of experimental teachers who were not given the opportunity to use reflective materials often thought they would have enjoyed the experience. This being the case, many more students could have and should have participated in The Experiment, but were not asked to do so.

In starting a program, such as the Experiment at Butte, getting rid of misunderstandings and changing faulty preconceptions is crucial, as events in the Butte project demonstrated clearly. The dangers of letting them develop even at the start were apparent in that teachers with false preconceived notions about various matters in The Experiment were reluctant to begin to experiment. Relationships between and among members of the teaching community were jeopardized as well if one group failed to understand the other.

Shedding light on preconceptions and misunderstandings was not the only contribution of The Experiment. A new typology of students in the program was indicated. The next section explains each of these types.

Reflection and a New Typology of Students

A major outcome of the Experiment at Butte was the new typology of students indicated during the history of the project. The Experiment revealed four important types of students: slow learners or unteachables, skill-oriented students, combined reflective and ABE skill-oriented students, and nonskill students. These types, except for unteachables, transcended basic and GED distinctions in that each category contained both basic and GED students. For example, there were slow learners who were basic students and slow learners who were GED students. Similarly, both basic and GED students fit into the category of skill-oriented students and so on. Foreign-born, American-born, and other personal distinctions were also incorporated in every type. In the categories, the goals, educational interests, and needs of students were taken into account.

Slow learners and unteachables. The first of the four basic types of students were the students whose speed in learning was considerably slower than other adult students. Teachers defined slow learners as people whom they felt unprepared and often unqualified to teach because of these students' need for special help in learning ordinary skills. Unlike their experiences with other slower students, teachers found that they made little or no progress with slow learners or unteachables. They did not know how to cope with the students' learning problems and believed that the students might be benefited if handled by a special education teacher who would be prepared with knowledge about slow learners and techniques of teaching them. Most slow learners were basic students, but a very few were GED students in terms of their education levels listed on their application forms. They ordinarily received basic forms of instruction in the program, however. Unteachables were all basic students who needed to learn only rudimentary skills.

Students in this category shared other traits in common. They were exceedingly dependent upon their teachers and did not seem to learn for themselves or study on their own as many other students did. Instead, with very slow learners teachers were forced to play more formal teacher roles in many instances since the students required much direction and help. Many slow learners whose progress was negligible to teachers were highly enthusiastic during lessons. They all seemed to make their best attempts at learning and pleasing their teachers. Their lessons, which were in tutorial form during the year because of the grouping problems already discussed, were important events in their lives. Their relationships with their teachers were crucial to their comfort at lessons, especially for students who became easily discouraged at not being able to learn.

Lessons with slow learners were characterized by workbook drills and repetition. Teachers found themselves teaching small tasks, such as how to read a clock or how to identify stop signs or other traffic signs. Teachers' bits incorporated continual encouraging and frequent socializing. Though a few slow learners took frequent breaks, most slow learners eagerly worked throughout their lessons, even when doing a series of drills or repetitious exercises.

Although teachers sometimes made visible progress with their slow learners, their experiences with them were generally discouraging since the teachers did not know if they were teaching them in the best possible ways. Many slow learners with whom teachers made no visible progress were termed unteachable. Teachers saw an even more vital need for special education skills in teaching these students. With the proper techniques, a special education teacher might be able to make progress with them. Unteachables were, perhaps, only unteachable in terms of particular teachers' inabilities and lack of skills to deal with them properly. This indicates that a special education teacher might be an asset to an adult basic education program such as the one in Butte. If none were available, other teachers in the program might benefit from inservice training sessions dealing with the methods of teaching slow learners and unteachables.

Skill-oriented students. A second major category of people in the Experiment at Butte were the highly skill-oriented students. Some students in both basic and GED teams fit into this category. The most important trait which they shared in common was their belief that their education as adults should include essentially ABE skill learning, including mathematical skills, reading, writing, and speaking English skills, and GED level skills. Basic skill-oriented students usually had a very distinct goal in mind, such as learning to read or write, and wanted to direct all of their education toward meeting that goal. GED skill-oriented students viewed passing the GED test as their primary goal and therefore wanted to learn only those skills or bits of information which would be helpful to know in order to accomplish that goal. During their lessons they were particularly pleased if teachers followed workbooks or other skill materials closely and made frequent references to the test and the possible questions on it. They became discontent if their teachers strayed too far from teaching ABE skills. In fact, some very skill-oriented GED dropouts, discontinued their studies for that reason. Both basic and GED skill-oriented students were characterized by a strong desire to achieve specific goals, which made them favor a fairly narrow skill-oriented curriculum.

Wanting to meet their goals in as short a time as possible was another important trait of skill-oriented students. GED skill-oriented students, especially, wanted as quick and as brief an education as possible. Comments, such as "I want to get my GED as fast as I can" and "I don't want to spend a lot of time fooling around in lessons," were common. To these GED students, passing the test and receiving a GED certificate were more important than what was learned in between. "It's the piece of paper I want and need to have to get a job that I want. Whatever I do in between doesn't really matter that much to me," were usual comments from these students. Basic skill-oriented students were not quite as narrow in their educational goals, but still wanted their lessons to deal with ABE skills only. They accepted spelling, reading, writing, and doing math problems, but balked at teachers' attempts to discuss topics, include materials other than skill-oriented ones, and relax the pace of their education.

For skill-oriented GED students, the GED test itself as a goal had a profound effect on the type of curriculum that these students seemed to prefer. Students were aware that the test covered several block areas of skill materials designed to touch upon some of the important facets of a high school education. To pass the test led students to believe they needed to know only skill-related information. Additionally, test questions often required the knowledge of memorized facts in each of the test divisions. Knowing this, students believed that they needed to memorize a variety of facts pertaining to test subjects. Wanting their teachers to present facts during lessons which were helpful to passing the test, allowed little room for their teachers to present subject matter requiring speculation or reflection. Instead, to learn many facts in a short amount of time was more important to them.

The format of the GED test influenced skill-oriented GED students' educational interests as much as the actual content of the test did. Questions or statements on the test were followed by multiple choice answer possibilities. There were right and wrong responses only, not purely speculative or subjective ones. As a result, students geared to passing the test were interested in knowing right and wrong responses to questions. They seemed to have little use for reflective materials which were not intended to elicit right or wrong interpretations. This also made their educational interests narrow.

Finally, many teachers thought that the GED test presupposed a particular concept of being educated. That is, they found the test to be broad in its scope of facts, but narrow in that it demanded factual knowledge in specific areas and did not include speculative knowledge. A student, who believed himself to be well educated upon meeting test requirements, most likely had a conception of being educated that primarily included a knowledge of skills and facts alone. Emphasis on the GED test, they felt, led to a rather narrow view of being educated.

In terms of adding reflective materials, skill-oriented students were unlikely candidates for The Experiment. They were unwilling, in most cases, to take even a small portion of time in their lessons to deal with reflective materials since doing so might slow their progress toward reaching their goals. Because of their preconceptions at the start of The Experiment, teachers with serious doubt as to students accepting experimental materials seemed to categorize all or most ABE students as skill-oriented students. Though there were many like this, certainly not all students in the program were narrowly skill-oriented. Many students' reactions to using reflective materials point this out. The skill-oriented student was, however, an important kind of adult in the Experiment at Butte. These students provided the most resistance to using reflective materials, while other types of students were more in favor of trying them. The demands of skill-oriented students for a quick, short, concise, skill and fact-oriented curriculum were important to meet. Teachers who did try to meet them kept the interest of these students. If not, they were displeased and sometimes became dropouts. Providing for skill-oriented kinds of students in the Experiment at Butte was therefore an important matter.

Combined reflective and skill-oriented students made up the third category of adult students discovered in the Butte program. The "combined reflective and skill" students and skill-oriented students were the most numerous in the program. As The Experiment proceeded, many more students were added to the combined category.

The most important traits which were typical of combined reflective-skill students (or "combined" students, as they were sometimes called) involved their educational interests and their ideas of a good education. Students in this combined category had a variety of educational goals which were similar to the goals of the very skill-oriented kinds of students. They wanted to learn to read, write, and speak English, do mathematics problems, and get their GED certification. They, too, wanted to join an adult education program for self improvement, confidence, prestige, and other reasons which prompted them to become involved in the Experiment at Butte. The combined students differed from purely skill-oriented students in that they were interested in learning both skills and things other than skills as well. They were therefore willing to incorporate into their lessons work that was not directed toward learning specific ABE skills. Much of this work might be identified as being a part of a "liberal" education. They enjoyed, for example, the use of humanities materials and the idea that they were developing their reflective skills while discussing these materials. Many experimental students who were in this category believed that developing their reflective skills was as important as learning ABE skills. Their educational interests were considerably broader than the interests of specifically skill-oriented students.

Though some combined students set the attainment of their GED certificate as an important goal, their ideas about the certification differed from the ideas of many skill-oriented GED students. While many skill-oriented adults viewed the GED certificate as the most important part of their education, the combined students believed that what they learned while achieving the certificate was more important than the certificate itself. One combined student remarked:

> To me the little slip of paper saying I have my GED is not too important. I really think the most important part is all of the information I've gained and experiences I've had while getting my education. I mean, if I never did get the certificate I'd still have the most important part of it. Maybe the certificate is important to people who do the hiring for jobs but, to me, the knowledge behind it seems more worthwhile.

Similarly, the combined students had a particular view of the meaning of a good education. Skill-oriented students' views of a good education involved especially the learning of skills to help them function in their daily lives. Combined students also thought that skills were highly important. To them learning to read, write, or speak, or do math problems was vital. However, this was not the only kind of learning they found necessary for a good education. They thought that an education of this nature was very narrow and would help them only to a certain extent in their daily lives. Instead, combined students' ideas of a good education were quite similar to Tussman's educational philosophy in that they saw a need to broaden the scope of their education by combining the necessary skill learning with learning how to think and use their minds creatively. They therefore were very much in favor of the reflective part of their lessons which involved reading reflective materials and discussing them with teachers and fellow students in ways that developed their reflective, thoughtful capabilities. They judged both kinds of skills, reflective and ordinary core ABE skills, as being important in coping with their everyday encounters. The combined students were good candidates for The Experiment.

An important group in the combined reflective and skill-oriented category were the foreign students. Many of these adults were classified as basic students because of their need to learn to read, write, and speak English. They were, however, not ordinarily just interested in learning skills, although they did express this as their primary goal. Foreign students, whose teachers did try the reflective materials with them, often became the most enthusiastic and eager experimental students. Although some teachers believed that the reason for this was the foreign students' need for attention of any sort, acceptance of anything presented by the teacher, or the desire to please the teacher, other reasons appear to be important. Their ideas of a good education, especially, paralleled the ideas of other combined students in that they favored a broad education rather than a narrow one that stressed skills only. Many of these students were educated to varying degrees in foreign countries and developed some of their ideas concerning education from those experiences. Some of the students reported that materials similar to the reflective selections in the Experiment at Butte were stressed in education programs in their own countries. They therefore expected them to be incorporated into their education in the United States. One Chilean student, for example, said that in Chile she began reading the works of ancient and modern philosophers early in her education and that she thought that these things should be included in the educational experience of any student. Another foreign student said that in her European country the most educated people were those who learned about the works of philosophers and other thoughtful writers. She considered it an honor to have such works included in her education in Butte. Therefore, they did not simply want to please their teachers or gain the teachers' attention by accepting anything presented in their lessons. These reasons, to be sure, were present, but according to the students themselves were not their most important reasons for trying and enjoying the reflective parts of lessons. Their views and expectations for education in general were far more important to them.

Another reason for the foreign students' accepting reflective materials was that many of the materials presented to them for their consideration were selections which dealt with topics that they could relate to their experiences in their own countries. In other instances, the authors of the selections were from the students' own homelands. In either case, these factors made the materials more interesting to the students by providing an initial point of interest. French students, for example, especially enjoyed works which they could relate to France or works written by French authors.

Both foreign and nonforeign students made up the category of combined reflective and skill-oriented students. They shared fairly broad educational goals and interests, which included a desire to learn ABE skills and reflective skills, and had similar notions concerning the nature of a good education. These characteristics and their acceptance of reflective materials in their lessons set them apart as a distinct and important category of students.

Nonskill students. The fourth category of students in the Experiment at Butte was made up of nonskill-oriented students. These students were set apart from the other kinds of students because of their particularly nonskill orientation. Two types of nonskill students were suggested: reflective students and "basic living students." Though some of the adults, who were considered reflective students, expressed a desire to learn to write or learn mathematics upon entering the program, once they were exposed to The Experiment they wanted to pay very little attention to ABE core skills. Instead, they wanted to devote all or most of their lessons to dealing with reflective materials. Many did not even want to learn skills while working with the reflective materials, which some teachers tried to do in order to bring continuity to experimental lessons. Reflective students advocated using reflective skills only. Their reasons for doing this were numerous. Some of the reflective students did not enjoy learning ABE skills. A few others were generally poor at dealing with these ABE skills. In both cases, reflective materials seemed to them to be more acceptable. Most students, however, were not reflective students because of wanting to avoid ABE skills. Instead, the most important and most common reason for their preferring reflective skills to learning other ABE skills was that they were even more adamant than the combined students in their belief that a good education must deal with reflective, thoughtful materials. In their opinions, to improve themselves, to build their confidence, or to help them cope with everyday matters through becoming educated meant learning reflective skills rather than ABE skills. They were students who were unsatisfied with or uninterested in a curriculum which incorporated ABE core skills only. Once presented with reflective materials they became eager students and were satisfied with their educational encounters. In a sense, their views of education were as narrow as the views of the skill-oriented students. While skill-oriented students believed that only ABE skills should be included in their education, exclusively reflective students believed that only reflective skills should be included in their education. In contrast, the combined reflective and skill-oriented students wanted a broader, more inclusive education containing both ABE core skills and reflective skills.

Students who were considered reflective students were often adults who did not see a crucial need for ABE skills in their lives. In their lessons, they worked a short time with ABE skills only. Those who were employed believed that reflective skill learning was more important to them in their jobs in terms of making them more thoughtful or more able to discuss various topics. People in this category who were unemployed, such as retired adults and housewives, agreed that reflection was more useful to learn than other skills since they were able to "get by" with their present ABE skills. Of those reflective students who were seeking employment, most felt satisfied that they were adequately informed about ABE skills, but needed to learn reflective skills to give them the confidence they lacked and the ability to deal with occasions that required them to be thoughtful or to discuss certain topics outside of their ordinary encounters.

Both basic and GED students were among the adults in this reflective category. In setting priorities they decided that learning reflective skills was more important than learning ABE skills in meeting their own personal needs. They therefore expressed a desire to engage in learning reflective skills primarily while de-emphasizing ABE skills in their lessons.

In the Experiment at Butte the basic living student was another kind of student that might be placed in this same category with reflective students as a nonskill subtype of student. Reflective students, as indicated, were not ABE skill-oriented because of their desire and self-defined need to learn reflective skills. Similarly, these others had needs other than to learn ABE skills and were, as a result, considered nonskill-oriented students. However, they did not necessarily need to or want to engage in reflective thinking. Instead, they were adults who needed to learn other kinds of information. Teachers found that these adults' need to learn basic nutritional and dietary information, ways to care for children, and health-care knowledge was more important to their well being than learning core ABE skills. Trying to incorporate such information in lessons devoted to skills helped somewhat, they believed, but was not adequate. As a result, this kind of student might be better accommodated in future programs as a nonskill student whose lessons, at first, deal with basic nutrition, health, and child care concerns and later with reflective or skill learning.

The four types of students which were participants in the Experiment at Butte were the slow learners and unteachables, the skill-oriented students, the combined reflective and skill-oriented students, and the nonskill students. Each type was unique in terms of educational interests, ways of handling goals, definitions of a good education, and self-defined needs. Of course, these types were ideal types used to describe students and some students appeared to fit into more than one category. Usually, however, they shared the traits of one more than the others and most students were easily classified. A program which stressed ABE skill learning alone or reflective skill learning only would therefore not satisfy all of the students or meet their needs. Instead, a program designed to accommodate each of the four types of students was indicated. The Experiment at Butte partially met these needs in that for some students a combined reflective and ABE skill curriculum was available. Students in experimental groups were, to some extent, able to select generally the kind of education they preferred. Chapter Five discusses a suggested program designed to accommodate these kinds of students.

Kinds of reflection and experimental students. Purely reflective students and combined reflective and skill-oriented students were considered together as experimental students in the Experiment at Butte. A further delineation of the kinds of experimental students was possible and, in doing this, distinctions in the kinds of reflection itself were indicated. The types of experimental students and kinds of reflection were revealed especially in terms of the reflective materials used. The kind and degree of reflection were influenced further by the form of teacher-student association that was developed. That is to say that the materials used and the type of interaction between teachers and their students influenced the kind and degree of reflection and fostered or developed certain traits in experimental students which made it possible to distinguish one type of experimental student from another.

The teacher-student association mediated the presentation of reflective materials as indicated in the preceding chapters. In the

Butte project, the associations between students and teachers were informal and friendly. They were further distinguishable, however, according to the ways in which teachers shaped interaction at lessons in terms of reflection. These kinds of associations were evident in both the experimental and control groups: skill-oriented associations, reflective-oriented associations, and half-interested associations. In the skill-oriented association the teacher fostered through interaction an emphasis on doing skills and brought this out in his students as well. The teacher supported this form of association by shaping the interaction to show the importance of skills to the student. Students who viewed their teacher's opinions as important came to share similar ideas. Lessons therefore emphasized skills. If a teacher and student shared a reflective-oriented association they were likely to engage more fully in reflective learning. A teacher who fostered this type of association brought out students' exploring capabilities and interests. They ordinarily explored a wide range of reflective materials and did so often and in an in-depth manner. The third kind of association, the half-interested association, was one in which teachers brought ideas of being only partially interested in reflective thinking and working with reflective materials. As a result, they used only some kinds of materials, usually the more simple ones. They used them only to a degree and not in all lessons. This was implicit in the discussion of the importance of teachers' attitudes in Chapter Three.

To distinguish particular kinds of experimental students and kinds of reflection, however, the types of reflective materials were important. Three kinds of reflective materials were used in The Experiment:

sophisticated classical materials, "daily life" materials, and simplified materials. The sophisticated classical materials were selections of fairly complex works by classical authors, such as Plato, Hobbes, or other philosophers and authors. The topics presented in the works were ones that could be related to current events or concerns, but dealt with the topics in a general or abstract way and did not discuss them in a particular context necessarily familiar to the student. A work of this kind might present ideas about the nature of man, a government's responsibilities to its citizens, or a discussion of good or evil, for example. Students had to deal with the topic in an inductive, context-free manner and developed examples which they could relate to the topic. Exploring was especially fostered by these materials. Daily life materials dealt with context-bound topics. They presented a specific situation, which students could easily identify with situations in their own lives. Simplified materials were works which were short and simply written and dealt with either context-free or context-bound topics. These materials were geared to basic learners who enjoyed working with reflective materials, but who needed more simple works to be able to cope with them effectively. Teachers often simplified other reflective materials for these purposes or selected readings from adult readers which they could present in reflective ways.

Experimental students and kinds of reflection were differentiated in terms of these kinds of materials. There were those experimental students who might be considered context-free reflective thinkers. They preferred to read and discuss the sophisticated classical works. The kind of reflection related to these materials and accomplished by these students was a sophisticated kind of in-depth reflection which was creative in nature and not limited to the daily lives of the students. They dealt with them inductively and were able to relate the topics in question to many contexts. These students were the most exploratory and creative students in terms of developing ideas and working with materials that were not limited to their everyday experiences.

Daily life reflective students were the second type of experimental students, who engaged in context-bound reflection. Instead of using the context-free materials, these students liked to read and discuss materials pertaining to their own experiences, the daily life materials. Reading articles about specific family matters or occupational concerns were examples of the topics they preferred to use. They were somewhat exploratory, but limited their discussion interests to subjects of immediate concern in their lives. The reflection they accomplished was not as in-depth as the first kind of reflection. It diverged from the central ideas to related everyday topics, but did not go beyond the students' range of encounters.

The third kind of experimental student, the simple reflection student, was a very basic student who enjoyed reflecting but needed simplified materials to deal with because of limitations in his communicative skills. This kind of student ordinarily engaged in simple reflection characterized by making a concise interpretation of the material, citing opinions about the topic, giving examples of instances in his life which illustrated the topic under consideration, and trying to point out why he held his opinions. The reflection was less complex than the other forms of reflection, which accomplished these same things at a greater depth.

There were, therefore, sophisticated, context-free reflective materials which stimulated an in-depth kind of reflection accomplished by context-free reflective students. Secondly, there were materials which pertained to modern, everyday experiences. Daily life experimental students used this kind of material which elicited daily life, context-bound reflection. Simplified materials were used by extremely basic students who were not yet able to read or communicate about more complicated materials. They engaged in the third type of reflection, simple reflection, which explored at a surface level the nature of the material and the relation of the student to it. The reflection was mediated, as previously indicated, by the type of association between the teacher and student, which fostered either a skill orientation, a reflective orientation, or an orientation to reflection that only partially supported reflective thinking endeavors. A highly reflective-oriented association stimulated all forms of reflection, especially in-depth reflection, and encouraged students to be interested reflective students of any type. Teachers, then, brought with them certain kinds of reflective materials, which were identified with the kinds of reflection and reflective students.

The kinds of reflection and experimental students which were discovered after the introduction of reflective materials were presented here. In the next section, changes in students as a result of The Experiment are described.

Changes in students. Students who participated in The Experiment reported that their experiences in it made many contributions to their lives. Although some students were in favor of participating in reflective thinking at the start of The Experiment, others had to be convinced of its value. Some skill-oriented students discovered that they were not interested in experimenting and preferred to learn only ABE skills during their lessons. On the other hand, combined students and reflective students gradually discovered that they enjoyed using experimental materials and profited from doing so.

Changes in and contributions to their lives were ordinarily small changes, but were important to the students. They are therefore important to include as outcomes of The Experiment. Students felt that using reflective materials and building their reflective skills added interest to their ordinary lessons and to their lives. Reading the reflective materials alleviated lesson boredom and led to discussions with their teachers or fellow students which they found stimulating and challenging. Many experimental students stated that they continued to think about these discussions after the lesson ended. As one reflective student mentioned:

> While doing my house work, I enjoy thinking about the philosophy writings and our talks about them. It makes my life seem a little less dull and more important. A couple of times, I even started talks like that with my friends!

Other students reported that they were reflecting about other things besides topics covered during lessons. One student added:

> Ordinarily, I would not have thought twice about my opinions in a lot of things, but since I've been reading those experiment articles I really stop to think about what I'm thinking and why I'm thinking it.

Adding interest in lessons alone made reflective skills worthwhile to include. Providing interest in students' daily lives and helping students to reflect about other topics were other major outcomes of The

Experiment which reinforced notions about the value of adding reflective skills to the ordinary ABE curriculum.

Some students noted that being exposed to reflective materials gave them new perspectives. Instead of thinking only about their own ideas, they learned about the ideas presented in the materials and of the opinions of other students. Bringing their own opinions into tension with these other ideas made them see new possibilities and enabled them to see their own preconceptions from another viewpoint. According to one woman:

> I think all of us in our group were trapped by our own ways of thinking. When we started questioning each other, we began questioning ourselves and learning about different ways of looking at things. It was exciting.

Another change brought about by experimenting that was noticed by several students was that they were beginning to really discover themselves by exposing their own ideas and preconceptions and attempting to discover the reasons for having them. One student who was just beginning to use some reflective materials mentioned, for example:

> The idea for using the new parts in lessons really appeals to me. It's fun doing it and I feel that my GED might mean something because of it. I'm still kind of afraid of working with the readings too much because when we discuss them I find out so much about myself. It's like discovering something new that was there all the time. It's scarey.

This student and others who made similar comments revealed that thinking about themselves in reflective ways was a new experience that they considered appealing but about which they were cautious.

"Being stuck," a feeling shared by many students which prompted them to seek a further education, was another area in which The Experiment seemed to intervene. According to students, by gaining new perspectives, starting to reflect about other concerns in their lives, and learning how to discover their "selves" they began to learn ways of escaping from feeling stuck in their own situations. Some experimental students expressed this as a "new freedom in thinking." Their reflective skills, together with the ABE core skills they learned, made them feel capable of changing their life situations even in very small ways. To them, this was quite an important outcome of their education.

A final major change in students noticed by both teachers and students who were experimenting was that persons who actively and verbally participated in The Experiment improved their communication skills. Experimental teachers in their evaluations of individual students pointed out the benefits of the students having to communicate reflective ideas to other students. Such a task was a difficult one for those who were learning English as a second language, but accomplishing it afforded them practice at transmitting their ideas to other students and to their teacher. This, in turn, seemed to make dealing with more simple information easier for them. Although it was difficult to compare each adult's advances in using communicative skills, students readily noticed apparent changes in themselves during The Experiment compared to the changes they experienced prior to experimenting. Many were convinced that having to discuss the new materials reflectively and creatively helped them develop their communication skills much more rapidly than before. The interest and challenge it provided were important reasons. Students, whose teachers also asked them to write about their opinions of certain reflective materials, believed that this speeded their improvement in writing English and "gave them essay topics in which they were interested and intrigued."

Teachers frequently noted that their students were beginning to think more logically after dealing with reflection.

It is apparent in the preceding discussion that students benefited in several ways from reading and discussing reflective materials. They discovered new interests and challenges in lessons and in their daily lives, new perspectives about their worlds and about themselves, and new ways of creatively developing their communication skills. Students who participated in the Butte program as experimental students seemed to appreciate the opportunity to accomplish these things in ways that they considered to be appealing and valuable.

The specific changes in students have been described here. In the following sections outcomes in other areas of the program are recounted.

Changes in Teachers

Because of their participation in The Experiment, teachers experienced certain changes in themselves and in their ideas. Their refuting their initial preconceptions and misconceptions was discussed at the beginning of this chapter and was a major outcome of The Experiment. They began to define students in different ways in terms of The Experiment and realized that they could, indeed, help their students to develop their reflective abilities. Teachers also learned that by participating in reflective discussions with their students they were able to develop their own reflective capabilities. Teachers mentioned at experimental meetings later in the year that they were not only getting more skilled at handling reflective discussions but were starting to reflect more during and outside of lessons. In doing this, their associations with students became mutual learning encounters. Teachers and students learned how to reflect together, though teachers played the role of guides or leaders. The development of reflective skills of teachers was an important outcome of their involvement in The Experiment.

Another outcome, a typology of teachers, was revealed in comparing all teachers, experimental and control group members alike, as to their own educational goals and interests, their ideas of a good education, and their conceptions about what they were able to do for students in their educational encounters, and their thoughts about The Experiment. The typology of teachers in relation to The Experiment paralleled the typology of students discussed previously in this chapter. Three types of teachers were apparent: skill-oriented teachers, combined reflective and skill-oriented teachers, and reflective-oriented teachers. Teachers in each category shared most of the same notions as their student counterparts. These ideas were discussed fully and need little elaboration here. Skill-oriented teachers believed that teaching ABE skills to their students was their most crucial task because skill learning, to them, was the most important part of their students' education. They often felt more comfortable doing this than dealing with reflective materials. These teachers yielded to highly goal-oriented students' desires to get their GED certificate in as short a time as possible, for instance, and realized the need to "teach to the test" under these circumstances. Though teaching to the test was not always done, both basic and GED skill-oriented teachers and teacher aides continued to concentrate on block areas of ABE skills. Whether or not they were part of the experimental group, they believed them to be much more important than reflective skills to their students.

Combined reflective and skill-oriented teachers adjusted well to The Experiment if placed in the experimental group. They believed that an ABE student could benefit equally from learning reflective skills and core ABE skills.

As in the typology of students, there were teachers who said that they might like dealing with reflective skills only. In the Experiment at Butte they were not permitted to do this. Instead, if they were experimental teachers they had to incorporate reflective and ABE skills without neglecting one in favor of the other. If they were in the control group they concentrated on teaching ABE skills. However, these kinds of teachers favored teaching reflection and would have been able to meet the needs of purely reflective students.

In addition to these kinds of teachers, teachers conceived of a fourth type, a person interested and skilled in adult special education. This teacher would be able to meet the particular needs of the slow learners or unteachables, which most teachers and teacher aides in the program felt relatively unqualified to do.

The typologies of students and teachers which were pointed out by The Experiment were quite similar. Students and teachers in the same category shared similar interests, opinions, and preferences. Importantly, they also seemed to prefer to work with others in their own category. For example, skill-oriented students preferred to work with skill-oriented teachers and vice versa. Similarly, reflective teachers and students enjoyed working mostly with each other. These findings were crucial outcomes of The Experiment that were suggested by data. Suggestions as to how to utilize these typologies in possibly effective ways are presented in Chapter Five. In the next sections, summaries of changes in the associations between teachers and students and among project personnel are discussed as outcomes of The Experiment.

The Development of Experimental Teacher-Student Associations

There were two crucial consequences of The Experiment which pertained to the development of experimental teacher-student associations. The first was the feeling that teachers and students in The Experiment were truly fellow learners. This idea was described in Chapter Three as it developed. Teachers and students were, in fact, able to cast aside their traditional teacher-student roles, especially while considering reflective materials. They became fellow explorers. Teachers were important as discussion guides or leaders. Control group teacher-student associations were as informal and friendly as experimental associations. Participants also did not play traditional student-teacher roles because of the influence of Project Homebound teaching methods. Control group student-teacher associations approximated the fellow learning relationship achieved by experimental teachers and students as part of The Experiment. During their lessons, control group teachers acted as directors, rather than only guides or leaders. Handling subject matter that involved ABE skills for the most part seemed to foster this, whereas dealing sometimes with reflective materials in experimental lessons fostered a greater fellow learning feeling. Both groups appeared to be striving for experimental interaction aims, however.

The association of one student with another in both groups was deliberately informal and not competitive. Students in the experimental group appeared to be only slightly more cooperative with each other in that each student became a teacher to the others when helping the other students to deal with the topic at hand. Differences were only minimal, since both experimental and control group teachers seemed to meet experimental aims which provide for the lack of competition in the student-student association.

A second important consequence of The Experiment was the fostering of a deeper self-revealing relationship between students and between teachers and students participating in the experimental part of the program. This development was noted by teachers and students alike, but appeared to be especially apparent to students. Because of the nature of most of the reflective materials and reflective discussions, lesson participants were forced to bring their own opinions, preferences, rationalizations, and segments of their personal life histories into lesson discussions. As a result, they revealed sometimes hidden parts of their "selves" to other lesson participants. Sharing such knowledge made them develop closer, more personal associations with one another. In effect, each person "knew something" important and personal about the others and they, in turn, knew similar information about him. Their sharing to this extent helped to make their associations closer and more deeply based. Their other reflective discussions often became more meaningful and probing. Control group teachers and students developed similar self-revealing associations during other parts of lessons in which teachers engaged in informal counseling. In this instance, students told teachers personal problems or worries, thereby revealing a part of themselves ordinarily not visible at lessons.

The development of a fellow learning feeling and a deeper self-revealing association were therefore two important developments in teacher-student relationships as a result of the Experiment at Butte. The third development, associated with the self-revealing association, was the counseling function. It was not due specifically to the experimental part of the program but was, instead, the product of the nature of the entire program.

The teacher-as-counselor. Because teachers and students interacted as friends and not as teachers and students, they came to care about one another as persons. Their care relationship was described in Chapter One. As a result of this kind of association, teachers were very aware of some of the elements in the personal lives of their students. Meeting them in their homes heightened their knowledge of the students' personal and family situations and therefore presented the teachers with the opportunity to engage in counseling activities. Students frequently confided in their teachers-as-friends and asked their advice as to how to handle situations in their personal lives, which teachers sometimes observed in home encounters. Teachers naturally found themselves becoming teachers-as-counselors without actually intending to do so.

The kinds of counseling activities in which teachers engaged were to provide students with a person to come to in time of need to talk about problems, discuss solutions to problems, and ask advice. Teachers acted, therefore, as listeners. In many cases, their listening was sufficient. Students often simply needed to vent their problems. By discussing matters of concern, students sometimes came to their own conclusions and were able to formulate their own solutions to problems.

Other students required additional help which teachers provided if they were able to do so. If not, teachers acted as referral persons by directing students to other persons or agencies capable of providing the necessary assistance. Teachers-as-counselors helped students to find jobs, shop for groceries and other necessary items, and picked up doctors' prescriptions. In some cases, they suggested ways of coping with situations with which they were familiar. Teachers discovered that many of their students were unaware of the resources available in the community which might help them. As a result, teachers often did research for their students by finding and making use of these resources for the benefit of the students. In doing this, they performed the referral tasks mentioned previously. They made students aware of the resources available to them and sometimes made initial contacts with the resource persons or agencies. Making job contacts for students, suggesting and arranging visits to doctors, directing students to the welfare department or employment agencies, and helping to place students' children in programs, such as Head Start, were important examples of the referral opportunities of teachers. Many teachers were able to make referrals and find the necessary resources, but had to engage in a great deal of research to locate them since they were not trained in this capacity. Having to act so frequently as counselors indicated the need for basic counseling and referral training as part of the preservice or inservice learning sessions for teachers to better equip them to be teachers-as-counselors.

Changes in the Relationship between Program Personnel

In the historical account of the Experiment at Butte, certain changes were noted in the relationship between various program personnel. This section points out and summarizes the more crucial changes in these relationships brought about by The Experiment, which were described previously. These changes were important outcomes. Major developments in the teaching community, teacher-administrator associations, and staff-consultant and evaluator relationships are therefore included.

Changes in the teaching community. Because of The Experiment, teachers had to divide into control and experimental groups. This division had no noticeable impact at first until The Experiment actually began and experimental teachers started to engage in experimental meetings and subsequent inservice training sessions. With this, teachers in the experimental group set themselves apart somewhat in the eyes of control group members. The community of experimental teachers became increasingly close and developed the team teaching spirit necessary for The Experiment. While their sharing and learning from one another flourished, the community of teachers as a whole suffered from the control-experimental divisions. The free flow of communications between all teachers in the project was reduced by a number of factors including misunderstandings, notions about secrecy, and a few control group members' feeling neglected. These divisions were not especially anticipated because of the original strength and closeness of the teaching community in general. However, that divisions did occur was important to note in terms of instituting a similar program in Butte or elsewhere.

The remedy for the disruption in the general teaching community appeared to be staff meetings. Though they were held infrequently, they seemed to alleviate tensions and dispense with many misconceptions. Data indicated that more staff meetings called on a regular basis would have been even more advantageous to maintaining the strength of the original teaching community while still allowing the experimental teachers to develop their own close associations and "experimental community."

Teacher-teacher aide relationships developed into close associations based upon helping, learning, and teaching activities. Aides provided teachers with clerical assistance and handled various tutorials for them. Teachers, in turn, acted as directors or helpers to their teacher aides in assisting them with lesson plans and problems dealing with particular kinds of students. As indicated before, though the teachers and teacher aides developed into teaching teams in that they shared experiences and helped one another in as many ways as possible, their close association seemed to decrease the interactions of teachers with each other. Teachers often devoted more time to helping their aides than interacting with other teachers. This, in turn, became another factor in the decreasing spirit of community shared by all teachers.

In terms of The Experiment, all of the experimental teacher aides, except one, felt relatively unqualified to deal with reflective materials adequately. They participated in The Experiment, for the most part, only when they were with their master teachers at a lesson in which the teacher introduced the reflective materials. Toward the end of the year, however, all of the teacher aides introduced a few reflective material selections to their own students on an individual basis. They found that they were partially successful in that their students responded to the materials by stating their opinions of the topics under consideration, but some aides noted that they could not pursue the topics more fully as the teachers were able to do. Their participation in The Experiment on an individual basis was therefore limited. Instead, aides seemed most capable and helpful when assisting the teachers in their own attempts to introduce reflection to students.

Developments in teacher-administrator associations. Differences in appropriate relationships between teachers and administrators were apparent in comparing control group members with experimental group members. As indicated in Chapter One, the control group portion of the program seemed to be benefited by an administrator who acted as a director to the program. Teachers seemed satisfied if the administrator assumed some authority over them in terms of their routines, without interfering with the actual ways in which they taught their students. Some control group members regarded the coordinator as their "boss." On the other hand, it became increasingly apparent that a different kind of administrator was necessary to benefit experimental group activities. Breaking down the traditional chain of command and removing notions of authority were indicated as necessary to further the aims of The Experiment. Instead, the spirit of teachers and administrators in learning together, which was mentioned in Chapter One as being important, became even more crucial as The Experiment progressed. The coordinator's need to experience what experimental teachers were doing on a first-hand basis to allow him to act as a leader in The Experiment was evident. Suggestions resulting from this experience about how to handle particular students would have been helpful to teachers as The Experiment began. Experimental teachers and aides expressed displeasure when administrative practices more suited to control group endeavors were practiced. They called for a better team approach to administration of the experimental project, which it seemed to lack. Sharing ideas and providing guidance and encouragement for each other were characteristics of this kind of administrative policy that appeared to be required to maintain the spirit of The Experiment. The coordinator's role as leader might have been especially important in order to "get The Experiment going." It appeared that experimental teachers needed this push in view of the newness of the project and their initial misunderstandings, which did not become fully apparent until later. Recommendations for the administration of The Experiment are presented in Chapter Five.

Staff-consultants-evaluator associations. During the project, there were several important changes in staff members' relationships with the consultants and evaluator in the program. This section points out the major changes as eventual outcomes of the project.

At first, teachers and administrators were unsure as to the nature of the roles of the consultants and the evaluator in the program. At preservice training sessions they viewed them as outsiders, as speech makers, whose involvement with the program was only minimal and temporary. They learned, however, that consultants and the evaluator were permanent participants in the program in that they continued to take part in various ways, such as by interviewing and observing. Gradually, teachers and the coordinator defined these outside personnel as intruders in the project. Consultants and the evaluator also began to define themselves similarly as a result. Early in the program, however, teachers accepted the evaluator as a part of the project and became willing informants. Most teachers freely requested the feed-back information which the evaluator could provide about The Experiment, especially to experimental teachers later in the year. The roles of consultants were unclear even after initial inservice training meetings and lesson observations. They continued to be considered as intruders. Eventually, the teachers came to look upon them as bosses of a sort, which was described in Chapter Three. Consultants considered this unfortunate as they were not intended to act in that capacity and believed that such a notion distorted their intended role as helpers to administrators and experimental teachers. After The Experiment actually began and through additional inservice training contacts, experimental teachers finally started to define and use consultants as helpers and resource persons. They thereby brought consultants to importance in The Experiment, which was supposed to occur throughout. Associations between them grew informal and friendly.

For the experimental program, consultants found that they had to be action initiators. They were required to "push" the development of The Experiment to get it started and keep it going at first. This was a role which consultants did not originally anticipate or prepare for and was due to the newness of The Experiment and experimental methods with which other personnel were relatively unfamiliar. In other similar programs, initial problems in staff-consultant relationships might be eliminated if they are anticipated. Learning about these changes was therefore an important development in and a contribution of The Experiment.

This section presented major outcomes in The Experiment related to changes in the associations between certain program personnel, changes in their roles and in other background items as a result of participating in The Experiment. In the next part of this chapter, important outcomes of The Experiment pertaining to introducing reflective materials and developing the reflective skills of students are discussed.

INTRODUCING REFLECTIVE SKILLS INTO AN ABE PROGRAM

Summary of Suggestions as to How to Introduce Reflective Materials

At the beginning of this chapter certain important outcomes of The Experiment were presented. Perhaps the most crucial outcome was the discovery that ABE students were able to reflect and think abstractly and were able to deal with most of the reflective materials their teachers presented to them. Further outcomes of The Experiment, which build upon those presented before, involve what experimental personnel learned about how to add reflective materials to lessons and select the right kind of reflective materials for their students. These were enumerated in Chapter Three, but are summarized here.

Of vital importance to adding reflective materials was the attitude of experimental teachers in doing so. Students were able to detect teachers' opinions about reflecting and the reflective materials in the ways that teachers brought the materials to the students and dealt with them during lessons. Teachers fostered one of several types of associations with students in relation to The Experiment, which mediated their material selection and presentation: skill-oriented associations, reflective-oriented associations, and half-interested associations. The characteristics of each kind were included earlier in this chapter. Students eventually shared their teachers' feelings about experimenting and were sensitive to changes in the teachers' opinions. As a result, project personnel discovered that most of the students with whom they developed an enthusiastic, reflection-oriented association enjoyed participating in The Experiment. In instances where they failed to present themselves as enthusiastic experimentors, students were not as enthusiastic about working with reflective materials.

Personnel also learned that developing a fellow learning approach in their lessons was important in helping students to reflect freely. By being fellow explorers neither teachers nor students seemed to feel pressured or on the spot. In working with reflective materials, being fellow learners removed notions of the teachers' ultimate expertise and fostered an atmosphere in which all participants were fellow experts and fellow learners at the same time. Under these circumstances, conversations became more relaxed, unrestrained and creative.

Another consequence of The Experiment was that, in general, teachers usually had to shape interaction in deliberate ways in order to really get their students to reflect. Although students in both groups asked abstract questions and made thoughtful statements, they began to truly reflect only when teachers channeled and pursued their thoughts. This was a crucial outcome of The Experiment because it illustrated the need for teachers to act as guides in developing the reflective abilities of students and suggested that students did not often develop them on their own until they learned ways of doing so at reflective lessons which set ideal circumstances for reflecting.

In adding reflective materials to lessons teachers had to devise ways to present the works in ways that would indicate their own enthusiasm about them and would stimulate the students' interests in working with them. In dealing with the materials, teachers had to make certain that their students did not feel threatened or inadequate. Presenting materials to GED students was a more simple task since they were more skilled at reading than basic students were. Developing both basic and GED reflective conversations was equally challenging, however, because teachers had to shape interactions in each instance. The specific procedures teachers developed were described in Chapter Three. They involved, in summary, these crucial steps: presenting the background or history of the work, having students read the materials (or reading it to students if students' skills were inadequate), discussing unfamilar vocabulary words, rereading the work to obtain its full meaning, letting the students develop their own interpretations and state their own opinions of the work, and, finally, shaping the conversation in order to bring out students presuppositions, their bases for these presuppositions, and alternative possible ways of thinking. In each of these steps, experimental teachers discovered the usefulness of drawing upon the adult life experiences of students to add depth and interest to conversations.

The changes in classroom routines that were important were that a period of time was diverted from ABE skill learning to reflective skill learning whenever doing so seemed to be appropriate and would maintain lesson continuity. In lessons, then, teachers worked on ways to integrate reflective and ABE skills. They often used reflective materials quite artfully to develop both ABE skills and reflective skills. Using a reflective paragraph to teach grammar or spelling was an example. Their definitions of good and bad lessons were also changes as were classroom routines. In their definitions, their subjective feelings about how they "experimented" became increasingly important.

These were the major considerations that teachers learned to take into account in actually presenting reflective materials in ways that developed the reflective abilities of students. Selecting particular materials was another task.

Choosing the Most Successful Reflective Materials

The teachers had various kinds of reflective materials at their disposal. They had the series of materials compiled by the humanities consultants, materials which they developed themselves, and materials which they adapted from adult education readers of various kinds and handled in reflective ways. Context-free, context-bound, and simplified reflective materials were developed, as this chapter noted. However, taken as a group, there were certain traits common to all types of selected works which made some reflective materials more useful than others. Context-free materials having these traits were often more successful than context-free materials without them. Similarly, daily life materials with these additional traits were used more often and so on. The most successful materials were those which teachers and students felt comfortable using, which dealt with a topic that both enjoyed discussing, and which seemed to lead into reflection. The best materials seemed to be those which teachers and students mutually wanted to include in their lessons. There were certain specific characteristics of the materials generally regarded as successful and most often selected. Primarily, these materials dealt with ideas that were applicable to current topics. In most cases, the era in which the work was written was not important as long as the topics under consideration pertained to something presently important. Works by Plato or Malcom X were equally successful if what they discussed was currently applicable. Secondly, most of the works that were used successfully were biased to a certain extent about the topic they described. This bias seemed to elicit strong student reactions and thereby provided an excellent starting point for a reflective discussion. Thirdly, works had to be geared to the skill levels of individual students. Shorter works with a simple sentence structure worked well with very basic learners, while more advanced students could deal with more complex writings. Finally, successful works for particular students were sometimes those which related to the students' range of experiences in even the most general ways. If the students believed that they shared anything at all in common with the works or with the authors of the works, the materials became more appealing to them and were good materials to use in beginning to experiment. French students enjoyed works by or about Frenchmen, such as selections from Madame Bovary, for example. Other students enjoyed topics that they could relate to their own lives in some ways even if the works were relatively context free.

Examples of specific materials used with some of the students in each experimental team are presented in the following section. Many of the works themselves are included in the Appendix to this report.

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Examples of Reflective Materials Used by Students and Teachers in Experimental Teams

This section presents selections from the records of individual experimental teams, which pertain to the reflective materials they used with many of their students. These selections are intended to further illustrate the kinds of materials selected by students and teachers, their order of presentation, and the approximate time devoted to each material. The records of Team Two are presented first, followed by the records of Teams Three and Six, respectively. Team Six was the GED team. The records are in their original form. Roman numerals refer to the materials numbered I-XXXV which were compiled by the humanities consultants. Other selections listed are materials that teachers compiled on their own. Some of the teachers and aides included brief comments about some of the selections.

Team Two

Carlin Good and Alberta Rowe

George	from "Success" April 3 Johann Schiller "All men...." April 10 Sun Chief from *Touch the Earth* May 22
Virginia	from "Success" April 6 Will Rogers May 8 Sun Chief from *Touch the Earth* May 22
Salvador-Ramon	"Christopher Columbus" Oct. 1-11 "Henry Hudson" Nov. 3 "Confucius and the Witty Child" Nov. 10-17 XIII. Praxilla March 22-29 XIV. Malcolm X April 5-12 Sun Chief from *Touch the Earth* May 18-May 25

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Eva - Charlie	II. Plato Dec. 13-19 "Spirit of Christmas" Dec, 21 Communications: The Transfer of Meaning January III. Ecclesiastes Jan. 25-28 XIV. Malcolm X Feb. 10-22 VI. Giradoux Feb. 22-28
Sue - Mitchie (December)	"Christopher Columbus" Oct. 20 "Haiku" Nov. 23 "The Burning of the White House" Dec. 5 "Spirit of Christmas" Dec. 20 "Henry Hudson" Jan. 10 "Reflection in Water" Jan. 17 Johann Schiller "All men...." Jan. 31-Feb. 7 XIII. Praxilla March 27-April 10 XXXII. Haiku April 4 from "Success" April 10 XXII from Citizen Toussaint May 8-May 15 from Will Rogers May 15-May 22 Sun Chief from Touch the Earth May 22
Danielle - Arlette	"Confucius and the Witty Child" Oct. 25-Nov. 1 "The Declaration of Independence" Nov. 15-Jan. 19 "Life" poems Jan. 26 "Waiting for Godot" March 16 VI. Giradoux March 1-16 XXIV. Aristotle March 22-29 "Go Out and Multiply" March 22 XXXI. E. E. Cummings March 29-April 5 XX. Rachel Carson April 12 XXVI. from Citizen Toussaint April 18 XIV. Malcolm X April 18-26 "Big Boys Win Again" April 26-May 10 V. Hans Christian Anderson May 10-May 17 from Madame Bovary May 17-May 24 from Touch the Earth Sun Chief "A Letter to William and Mary College" May 26-
Cecilia	IX. J. S. Mill Feb. 18-March 17 XXXI. E. E. Cummings March 29-April 5 XV. Plato March 27-April 7 XI. J. S. Mill April 20-April 27 "Big Boys Win Again" April 20-April 27 V. Hans Christian Anderson April 27-May 5 German Arciniegas "The New Man of America" May 5-15 XXX. Charles Darwin May 15-May 25 Arthur M. Schlesinger, Jr. "Histories of the Future" May 26-

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Coleman - Lawrence	"Zoning and Consolidation in Butte" Jan. 13-20 XIII. Praxilla Feb. 15-22 XII. Archilochus March 2-9 XIV. Malcolm X March 25-28 from "Success" April 4 from Will Rogers April 21-27 "Big Boys Win Again" May 2-May 9 IV. from "The Prodigal Son" May 12-May 16 Sun Chief from Touch the Earth May 19-May 26
Christa - Anita - Maria (January)	Communications: The Transfer of Meaning Sept., Oct., Jan. "On Education" (G. Berkeley, F. Bacon and Plato) Oct. 15-26 "Confucius and the Witty Child" Nov. 8-15 Plato Apology and Crito Oct. 15-Nov. 8 "The Declaration of Independence" Nov. 15-Dec. 14 "Spirit of Christmas" Dec. 14 "Gospel according to Mathew" Nov. 30-Jan. 17 IX. J. S. Mill Jan. 24-Feb. 7 A. M. Schlesinger, Jr. "Histories of the Future" Jan. 31-Feb. 7 "The Day the Bureaucrats Froze Stiff" Feb. 7-18 XIII. Praxilla Feb. 18-24 VI. Giradoux March 6-13 "Waiting for Godot" March 16 XXXI. E. E. Cummings March 27-April 7 Plato; Euthyphro April 1-27 XV. Plato "Myth of the Ring" April 7-21 XX. Rachel Carson April 13-21 "Big Boys Win Again" April 21-27 II. Plato from Georgias April 27-May 1 XIX. Thucydides from A History of the Peloponnesian War May 11-19 from Touch the Earth "Letter to William and Mary College" Sun Chief May 5-19 XIV. Malcolm X May 19- "Constitution of the State of Montana" May 19-

Team Three

Mary Madlena and Terri Byrne

"The Snuff Grinder's Son:
Article dealt with colonists coming to the U.S. The patriots were from America and the Tories were from England. If there was a war between America and Holland or Chile which country would you choose?
Jan. 17- Joe and Josie

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Joe- He left Holland because he disliked its government. He's a citizen of America, not Holland.
Josie- Even though, she's an American citizen, Holland is her country because she was born there.
Jan. 18- Ginette and Olga
They left Chile not because they disliked it, but because of their husbands' occupations. They would, definitely, be for Chile if there was a war.
Jan. 18- Narcissa
She would be neutral.

"A Star for Freedom's Banker"
What makes a person great?
Jan. 25- Ginette and Olga
Ginette- A person who does what he believes to be right.
Olga- A great person is not made by titles, high positions or worldly possessions, but by personal qualities and high character.

"Forecasts of the Future"
Jan. 27- Bert
He liked the new inventions, but had no reasons why.
Jan. 31- Ben
The world is progressing too fast for the common man.
Feb. 2- Rita
Believed Butte should be more interested in city planning because of the many slum areas.

"Zoning and Consolidation"
Jan. 31-Feb. 7- Joe and Josie
Joe- He's against zoning. When a person owns his property no one has a right to tell him to fix it. That's not freedom.
Josie- Zoning laws are made to protect all levels of people. That is freedom.
Feb. 3-10- Don and Nancy
Don- If zoning laws were enforced in Butte, the city would become too class structured.
Nancy- No comment.

"Author's Tone- Serious, Fanciful or Humorous"
Feb. 7- Ben
Paragraph on Jack Frost is fanciful because it's imaginative. His wintery landscapes are like an artist's masterpiece.
Feb. 10- Bert
Couldn't express himself.

NOTE: Team three began to use reflective materials during January, 1972. Each work took approximately 1 or 2 lessons to complete if half hour at each lesson was devoted to considering reflective materials.

"Histories of the Future"
Feb. 14-21- Joe and Josie
Joe- The article was criticizing Nixon because he hasn't ended the war in Viet Nam.
Josie- Article was a warning of what could happen. Nixon's strength or weakness has nothing to do with America's problems. No man could control all of our problems.
Feb. 15-22- Ginette and Olga
Ginette- Chile has been ruled by the army and it isn't as bad as American people think.
Olga- Situation cited in the article could never happen because America's main principle is democracy.
Feb. 17- Don and Nancy
Neither had that much to say.
Feb. 18- Bert
America is becoming too free and disorganized. Army leadership would create unity and organization. Then we could, again, elect our candidates and become a democratic country.

Walking XVIII
Feb. 29- Ginette and Olga
Ginette- The buffalo breaking away from the herd is showing his instinctive right to be free.
Olga- People are like the buffalo. They want to be free and independent.

Walking XVII
March 7-14- Ginette and Olga
Ginette- A person is a fool in someone's opinion no matter what he does.
Olga- A person's not a fool in his own eyes because he's doing what he wants. Therefore, slumbering a fool's allowance isn't really being a fool.

"All Men Will be Brothers"
March 6- Ben
Men will never be brothers because of their jealousies which cause crime and war. The more ambitious men become, the less love they have.
March 8- Rita
In Christ's time men were fighting. Today wars are being fought over the same things, only on a larger scale. Even when there is no war, men are not brothers because of racial prejudices.

"Life" F. G. Marshall
March 6- Joe and Josie
Joe- You can please some of the people some of the time, but not all of the people all of the time.
Josie- Life is as bad as you make it.
March 21- Ginette and Olga
Ginette- Don't care what other people think and your life will be happy.
Olga- You've lost the battle before you've begun.

"Life" Jake Osterburg
March 20- Joe and Josie
March 28- Ginette and Olga
The poem didn't appeal to any of them.

"Go Out And Multiply"
March 13-20- Ben
Birth control depends on your own economical situation.
March 27-April 10- Joe and Josie
Joe- The Pope doesn't have the right to dictate.
Josie- The Pope is doing what he believes God would want him to do.
April 11-18- Ginette and Olga
Both believe in birth control because they've seen so many underprivileged children.
April 20-27- Don and Nancy
Everyone should act according to his own economical situation. If you can afford it, there is nothing wrong with having 5 children.
April 14-21- Bert
The Pope is a dictator like Hitler. No one has the right to tell you to have children, especially the Pope.

"An Arabian Proverb"
March 27- Ben
We are all fools because we think we know everything.

"Failure and Success"
April 17-24- Ben
Failure makes success.
April 17-24- Joe and Josie
Joe- Weak have had everything given to them.
Josie- Parents try to protect children when they fail.
April 25-May 2- Ginette and Olga
If you do what you are afraid to do you will become a bigger and better person.
April 21-28- Bert
A person who succeeds without failing will never know the true feeling of winning.

"I Am Your Friend"
April 25- Narcissa
Friendship can't be bought.
April 27- Bert
No comment.

"Don't Envy Other Folks"
May 4- Ginette
Don't envy people for worldly possessions, but admire them for personal qualities.
May 5- Olga
Some people will be greater and some will be lesser, and we might as well accept it.
May 10- Rita
Envy people for their knowledge.

"Character"
May 9- Ginette and Olga
Ginette- Action not thought is what counts.
Olga- Men should do good deeds instead of dream about them.
May 5- Bert
Men are blind to themselves and other people's needs.

"No Enemies"
May 5- Bert
If you always do what you believe to be right you can't help but make enemies.

Ethics Aristotle XXIV
May 9- Ginette and Olga
Ginette- All work and no play makes Jack a dull boy.
Olga- Amusement might've been thought of in a different way in Aristotle's day- drinking, prostitution, etc. What we take for amusement - participating in sports, going to a show - might've been thought of as education in Aristotle's day.

"Gambling" Con-Con
May 11- Don and Nancy
Don- It would bring more money into the state.
Nancy- It would bring more corruption into the state.

"A Sick America"
May 15- Joe and Josie
Joe- Many of America's problems stem from the younger generation. They've had no discipline.
Josie- Our government causes many of our problems. It's said to be democratic. Do we vote on sending astronauts to the moon or where the rest of our taxes are to be spent? These acts cause the people to distrust their government.

"April 12th"
May 15- Ben
We're meant to love each other, but that doesn't always work. The interlude is very long. There are many lonely people.

Materials that received very little response.
Joe and Josie- "Big Boys Win Again"
Ginette and Olga- The Prodigal Son IV, Silent Spring, Secret Spring XX, Wise and Witty Sayings.

Team Six

Lynn Hinch

April 12-14
Borges
Linda-- "The man is a Jew."

April 17-21
E. E. Cummings
Rose-- "Man has known Christ in the past, but no longer recognizes him."
Pat C.-- "Dark is a symbol of lack of knowledge."
"Black Eagle Speaks"
Pat D.
Faye and Alvin
Linda

April 24-28
Plato, "Myth of the Ring"
Linda
Faye and Alvin "Man is basically good."
Mary and Sid
Pat C.-- "Men do right because they are forced to."

"New Man of America"
Rose
Linda "Author feels inferior among world nations."
Pat C. (This reading did not generate much interest, possibly
Faye and Alvin because Latin America is not very pertinent to
Pat D. these students.)

May 2-5
Ox-Bow Incident
Rose
Pat D.
Pat C.
Mary and Sid
Alvin
Faye-- "Man in general is basically weak; passage reflects the old western standard of manliness which wasn't good.
Silent Spring
Pat C.-- "We should keep experimenting, as with birth control. We must decide what we can afford to do and not afford to do."

May 8-12
Touch the Earth, Six Nations
Pat C.-- "Our system of education is better."
Pat D.
Linda-- "Indian way of life better; our education is responsible for weakness and incompetency in our society."

Faye and Alvin
Mary and Sid
Rose-- "Are there enough trained Indians to provide their own education now? Even this Indian would have been willing to learn new and better ways of doing things."

Everyone agreed that American society today does not allow for much difference or variety. In regard to dress no one mentioned that long hair prevents some people from getting a job but Linda mentioned that a businessman must conform to the suit-and-tie image. This passage required much effort to get people to see the value of what the Indian was saying and certain disadvantages or faults in our system of education.

May 15-24
Thoreau, Walking
Pat C.
Linda-- "Dignity is knowing oneself."

Malcolm X
Linda-- Pat C.-- Both students seemed to understand and be able to interpret the selection from Malcolm X, but when we compared that selection with the reading from John Stuart Mill on liberty, both at first said that they were saying the same thing, although after discussion, each saw differences.

COMMENT:

The quotes are general conclusions or specific comments that the students made during the discussions on the readings; they are random samples. I also added comments about the readings that I found difficult to work with, in that they didn't generate much discussion or resulted in interpretations which I thought were far removed from the main idea of the selections.

Team Six

Dulcie Allen

1. from Common Confusion - Kafka
   Nora ..... this is ridiculous!!

2. from Georgias - Plato
   Nora Comment: Student understood this well, although her remarks and answers to questions were very "sugary." No one can possibly be as good as she implied she is.

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3. from "All is Vanity" - Ecclesiastes
Nora — Student looked up Bible for this. Enjoyed it greatly.
Comment: Same as above.

4. from "The Prodigal Son" - Luke
Nora

5. from The Emperor's New Clothes - Hans Christian Anderson
Nora ..... words of truth come from a child. People will do anything to stay in favour with 'higher-ups'

6. from The Enchanted - Jean Giradoux
Nora

7. from The Slanderer - Chekhov
Nora

8. "The Death of the Ball-Turret Gunner" - Jarrell
Nora — Did not understand this at all until I explained it. Then did not like it.
Reann -----too sordid!
Linda — It is senseless to sacrifice human lives for 'issues'

9. from On Liberty - J. S. Mill
Nora — Comment: I thought the following remarks very surprising coming from a welfare recipient.
Ques: Why shouldn't government ...
Ans: People would call it a dictatorship
Ques: ...kinds of harm the government should prevent
Ans: Should make us more independent. Talk about preventing harm, it has already been done. People drawing 'handouts' -- and they look on this as their way of life and expect it as their due.

11. from On Liberty - J. S. Mill
Linda

12. from Greek Lyrics - Archilochus
Linda

13. from Greek Lyrics - Praxilla
Linda

14. Malcolm X
Linda — Had no problem interpreting selection. Cited examples of how easy it is to blame school system, when probably the real blame lies at home with not enough parental discipline. Thought that Malcolm X and John S. Mill were saying basically the same thing.

15. *Myth of the Ring - Plato*
Linda — Man is basically good

16. from The Will to Believe - James
Linda

17. from Walking - Thoreau
Linda

18. from Walking - Thoreau
Linda

19. from A History of the Peloponnesian War - Thucydides
Linda — People are blinded by their hate and rage. Should not forget that there is need for a friend, no matter what!

20. from Silent Spring - And No Birds Sing - R. Carson
Linda — Man must learn to control what he has invented, and in so doing protect our natural resources.

28. from Beyond Freedom & Dignity - B. F. Skinner
Linda

29. from Beyond Freedom & Dignity - B. F. Skinner
Linda

Let Us Give Thanks - Ella Wheeler Wilcox
Linda — We have to be reminded occasionally of our many blessings that we too often take for granted.
Nora — This was this student's selection

from A Biography of Henry Thoreau
Linda

from Histories of the Future - Arthur M. Schlesinger, Jr.
Linda — Thought a situation like this could easily come about, at the political parties are getting further and further apart

An Arabian Proverb
Linda — Wondered if the author knew which category he fitted into. Thought he sounded superior.

Wise & Witty Sayings - Will Rogers
On Truth & Talk
Linda — ...when ignorance gets started... Linda thought the trouble in Ireland which is going on now is an example of this
Reanne
Eleanor

Philosophical Thoughts

Linda) Reanne) Eleanor)	Brought up about the Indian cultures and traditions that are lost. Linda also questioned if the government has any right to impose its will and traditions on minority groups and other nations, when maybe those people are quite satisfied with their way of life.

Desitarata - Unknown author

Linda	Good advise for improving one's personality. The line, "you are a child of the Universe....you have the right to be here" expresses the whole meaning of how I feel about the entire selection.
Reanne	Very beautiful
Eleanor	As above.
Nora	The selection was originally proposed by Nora, another student.

Go Out and Multiply

Eleanor	This is as bad as going to the White House and meeting the President and insulting him to his face. A person should put his trust in the right place - God - he will take care of you, no matter how many children you have. Don't bother to trust people, their talk is just a bunch of words on the wind. As to the statistics on having one child, what would happen if that child turned out to be retarded! It could happen to every family, and with the population so small, our world could wind up being populated with morons!
Reanne	Upset student - made her cry.
Linda	Thought it one's own business as to the size of family. Admitted though that over-population is becoming a problem.

Life - Jake Osterburg

Linda	Liked this.
Nora	This was a student's own selection.

I am Your Friend - Fra Giovanni

Linda	A person should look for happiness by being kind, warm and truthful, and not hope to achieve it by material things.
Nora	This was a student's selection.

The New Man of America - German Arciniegas

Eleanor	Thought the author should realize that there are other things besides prejudices of people, that could cause the downfall of the U.S. faster.
Linda	Author was saying that L.A. has progressed, but wouldn't want it to have the racial problems of the U.S.

The Importance of Outcomes of The Experiment

This chapter was an account of the various outcomes of The Experiment. Changes in background items and in ways of dealing with reflective materials were areas of concentration. These outcomes were important to point out and discuss further since they illustrated the kinds of things that project personnel learned because of their experiences with The Experiment. Comparisons with control group events were implicit, but were pointed out whenever necessary for clarification.

Outcomes were additionally crucial to discuss because they provided the bases for the recommendations and suggestions cited in Chapter Five concerning the Experiment at Butte and possible future programs developed along its same guidelines.

Chapter 5

REFLECTIONS ON THE EXPERIMENT

THE ACHIEVEMENT OF AIMS

This chapter contains a final comparison of the events in the program set forth in Chapter One. These comparisons were drawn throughout this report, but are presented together in this section in summary fashion. This account is followed by recommendations concerning the transferability of the program and suggestions for an alternative kind of ABE program based upon the knowledge gained in the Experiment at Butte.

Aims to Develop Students' Reflective Skills

Perhaps the most innovative portion of the Experiment at Butte was its attempt to implement in an ABE program the educational model of Joseph Tussman, which called for an education program that combines the development of a student's reflective capabilities with the teaching of ordinary skills. An ABE program designed to implement this model would require that teachers neglect neither the student's ABE skill learning nor his reflective skill learning. To compare it with these aims, the Butte experimental program was judged according to how well it was adapted to implement this model and according to the extent to which reflective capabilities were developed as a part of ABE training. Additionally, it was judged according to the extent to which the development of these reflective capabilities encouraged continued work in ABE and other adult education programs. Based upon data gathered during this project which the preceding chapters described, some project personnel were reluctant to start experimenting due to their preconceptions and misconceptions. They eventually did start and were able to adjust and incorporate this philosophy into the experimental part of the Experiment at Butte and were able to develop their students' reflective skills. They therefore were successful in meeting these and other reflective aims.

During the course of the project, personnel learned that ABE students were, in fact, able to reflect and that many students enjoyed learning reflective skills together with ABE skills. Not all students liked the inclusion of reflection in their lessons, however. They were described previously in this report. In following sections, their place in ABE programs is discussed. Teachers were able to see noticeable progress in their students' reflective abilities after many encounters with reflective skill learning. Also discovered was that in order to develop reflective skills in students, teachers needed to shape interaction during the consideration of reflective materials. Students, in general, did not seem to engage in reflection, as it was defined in Chapter One, on their own. Students, too, noticed that as a result of their experimental lessons they were beginning to reflect about other lesson topics and about things in their everyday lives. As indicated in Chapter Four, the reflective capabilities of students were developed to reach varying levels of reflection based upon the kinds of materials used. Some students engaged only in simple reflection due to language barriers. Others engaged in context-bound reflection about matters in their daily lives. Some others were able to engage in context-free reflection.

Teachers also found success in integrating reflective skills with ABE skills during ordinary lessons. They developed specific procedures for introducing reflective materials which preserved lesson continuity. Keeping lesson continuity was a considerable problem, but most teachers devised ways to smoothly interject reflective skill learning in lessons. These procedures were described in Chapter Three and again in Chapter Four. They showed that a program which sought to integrate reflective skills with ABE skills could be implemented.

The development of reflective materials to suit students was a continuing endeavor of experimental teachers and humanities consultants. After the December inservice training session, teachers had only the initial series of reflective materials compiled by the humanities consultants. Later, the consultants and teachers themselves prepared other materials which they geared to particular kinds of students. This seemed to facilitate the introduction of reflection into students' lessons because the materials chosen for them usually suited their skill levels and interests. In addition, students had a wide range of topics from which to choose. That teachers were able to compile their own reflective materials similar to consultants' materials was an important development in the program. Doing so indicated that they were beginning to understand the nature of their work as experimental teachers and were striving in significant ways to meet their students' individual needs.

The development of reflective capabilities seemed to encourage the students' continued work in the Experiment at Butte. Many experimental students reported that they found greater enjoyment in lessons when reflective materials were added. Some became highly enthused with getting an education and participating in lessons once they began to experiment. To them, reflective materials and the discussions which followed made lessons more interesting and stimulating. "When I start to find the rest of my lesson getting dull," said one student, "I always want to do the experimental materials because they're interesting and lively and really make me think." As indicated before, the inclusion of reflective materials made some GED and basic students feel that they were getting a better education. They often called the lessons which dealt partly with reflective skills their "liberal arts lessons," and appreciated that they were getting a broad education. GED students who were interested in learning a as much as possible while striving for their GED certification often liked reflection in their lessons for that reason. Dealing with reflective materials and learning that they were becoming competent at it gave other students increased confidence in talking with others. A few students stated that they were beginning to think they might be able to handle college work as a result of their success with reflective materials. Students' other beliefs about the importance of the reflection in their lessons and in their lives were included as outcomes of The Experiment in Chapter Four.

It is significant to note that not one program dropout quit the project because of The Experiment. In fact, data point out that adding experimental materials to students' lessons actually prevented some students from terminating their studies. The new materials often added the challenge and stimulation to lessons that uninterested students needed in order to keep them involved. Similarly, students who had already quit the program stated that they might not have done so had they been able to participate in experimental lessons. They complained that working on ABE skills only made lessons seem tedious. They would have welcomed a change of pace and something to make lessons more engrossing without dispensing with their skill learning.

From the preceding examples and from the in-depth accounts presented in other chapters, program experimental personnel were, once The Experiment actually began, quite successful in meeting reflection aims. They did, in fact, find ways to integrate reflective skills into ABE lessons that worked well with numerous experimental students. For the most part, students who participated gained increasing interest in their lessons and in "being educated" in general. Those adults who might have dropped because of a lack of interest often did not because of their involvement in The Experiment. Both teachers and students were able to see progress in themselves in terms of developing reflective capabilities. Some students especially noticed this in lessons and in their daily lives. There were many problems, of course, with which program personnel had to contend. These were described in the historical account of the project. Though they delayed the start of The Experiment and caused some feelings of discouragement, the problems that happened provided rich information concerning the transferability of the program and gave project personnel an important learning experience concerning ABE projects in general. In this respect, even problematic encounters were valuable and successful in the data which they yielded.

Interaction Aims

At the beginning of Chapter One, certain aims for interaction within and between educational groups were listed. These aims were implemented throughout the entire life of the Experiment at Butte. Although these aims were designed as experimental aims, both experimental and control group teachers attempted to meet them. As it was their responsibility, experimental teachers made regular and deliberate attempts to implement these aims. Control group teachers also engaged in meeting them as a way of trying something somewhat different, though not entirely different, from their own lesson approaches. Both groups of teachers were experimental in this sense.

The successful implementing of these aims was most especially due to the nature of the teacher-student friendships and to the fellow learning approach which teachers developed during their lesson encounters with students. Both teacher-student friendships and the fellow learning approach were carefully explained previously and need no further presentation here. They did, however, help teachers deal with interaction aims and are important to note. Students and teachers became responsive to each other's needs, desires, and activities through their friendships. With informality and friendliness, they were able to share and synthesize their needs, likes, and dislikes in most instances.

The fellow learning approach, which involved a casting aside of traditional teacher and student roles and developing a learning together attitude, put teachers into the position of guides or helpers to students. This was an aim of the project itself and, as prior chapter discussions illustrated, was easily achieved by teachers under most circumstances.

Where the fellow learning approach was most difficult to use was with very slow learners, who required much direction, and in large GED classes at which skill-oriented students often preferred having their teacher play his role as teacher in presenting and discussing facts. The fellow learning method made possible the attainment of other interaction goals. Because of it, students who were fellow learners cooperated with each other for the most part, helped each other to grasp the content of lessons, sometimes tutored each other outside of lessons, and engaged in vivid discussions in which one student drew out the other. As fellow learners, students came to feel that lessons were not threatening because as a group (even if the group were made of a single teacher and a student) participants were all concentrating on the lesson materials and on ideas under question, rather than concentrating on the student or his inadequacies. This made lessons seem comfortable to students. Students were further gratified knowing that the teacher, too, was learning at lessons. Students found themselves feeling as if they were teachers at times and felt that their contributions to lessons were significant. Teachers shaped the interaction at lessons to bring this out by encouraging the students, telling them their comments were important, and by showing to the students that they, the teachers, were learning something, too.

The fellow learning approach was carried out even further in that teachers and students both actively engaged in selecting the means and materials to use in presenting the ABE curriculum. Although some control group teachers encouraged this, this aim was particularly accomplished by the experimental teams in selecting reflective materials. Teachers and students together decided on the materials to use in most cases. If not, teachers asked students about their preferences or dislikes before making the selections themselves. At any rate, students had a definite importance in helping to select appropriate materials.

The only interaction aim which was problematic was the aim specifying collegial teaching, learning, and sharing. An extension of this aim was what Tussman referred to as the development of the teaching community. The preceding chapters showed that this community was a strong, healthy one at the beginning of the year, but that it suffered from experimental-control group divisions once The Experiment really began. A partial break in communicating and sharing happened in the community as a whole as a result. The community of experimental teachers became increasingly strong while divisions in the general teaching community were occurring and did seem to meet that project aim. Additionally, the experimental teachers met weekly in experimental meetings to share and discuss their experiences. Regular all-staff meetings were not instituted on a regular basis.

The interaction aims as set forth at the start of this report were, in general, quite successfully met by both experimental and control groups. It is important to note that most of these aims were extensions of the methods which teachers developed during Project Homebound. The fellow learning approach at its best was probably the most distinctly different interaction aim.

Grouping Attempts

Some grouping aims, which involved dividing teams according to basic and GED distinctions were very successful. Others, which involved bringing students into small groups for lessons, were only moderately successful.

Having teams that taught an exclusively GED curriculum and teams that taught an exclusively basic curriculum appears to have been an excellent idea. Teachers were benefited in that they were able to reduce the amount of time devoted to lesson planning and finding resources. Teams found grouping easier in that they rarely had to worry about mixtures of basic and GED students in a single group. However, after placement on teams based on the education levels of students that were reported on their information sheets, each team still had a few students who were not working at the level of the team. One GED team, for example, was assigned all reported GED-level students. After working with the students a short time, the teacher found that several of the students were, in fact, actually basic students in terms of their demonstrated skills. They kept the students on the team, but had to make special preparations for them. Regrouping was indicated in these instances, but was rarely done as it was not a general policy of the program. Suggestions for handling student GED-basic classifications are included in the recommendations section of this chapter.

Once students were placed on teams, grouping was supposed to occur as soon as possible. Some teachers were able to bring their students together in groups of two or more almost immediately and continued grouping endeavors all year. Other teachers did not find success in grouping. In these instances, teachers' reluctance to work with groups and their preconceptions and methods of picking a time to tell students about wanting them to group seemed to figure importantly in grouping failures.

Chapter Two describes the nature of successful and unsuccessful grouping.

The concept of grouping students into small educational units seemed to be a useful and worthwhile endeavor. Students who were grouped during the year were very much in favor of participating in a small group. They said that they benefited from learning from and with others in the group, that they were not constantly under pressure, and that they enjoyed their group encounters. Teachers who successfully grouped their students realized these and other benefits for their students and noted that their lesson planning time was substantially cut. They were able to meet more students for a longer period of time. In this conceptual sense, grouping was shown to be very worthwhile.

Grouping successes and failures were, therefore, evident in the Experiment at Butte. They were particularly important in that they revealed information crucial to the suggestions for grouping presented later in this chapter.

Field Trip Aims

In the Experiment at Butte, field trips were to be of major importance. As explained in Chapter Three, however, a lack of financial support precluded major field trip endeavors. Nevertheless, some teachers did take their students on field trips. They felt that students might benefit from these kinds of experiences. All field trips were discovered to be worthwhile events that were particularly valuable to students. As intended, students discovered through field trips the resources of the community and their place in it. Also, participating in field trips encouraged students to feel as if they were important parts of a larger educational community. Field trip endeavors seemed extremely successful in these areas and should not be omitted from an ABE program similar to the one in Butte.

Achievement of the Personal Aims of Students

The extent to which students achieved their own, personal aims in the Experiment at Butte was revealed especially in their comments about themselves and in teachers' subjective evaluations of each student. In general, students in all teams of the program felt that they made substantial progress toward achieving their goals. If not, students usually blamed themselves, their lack of work, or their lack of skills. In many instances, dropouts believed that they had failed to meet their own aims because of personal or program reasons, such as not moving rapidly enough in GED work. In terms of small tasks, teachers and students believed that they made a great deal of progress, even if the students' main goal, such as learning to speak English fluently, was not met en~~tirely.~~ However, even if students seemed to have met their original goals during the program, they usually felt that they could still do more toward achieving their personal educational goals. A student, who said at first that he wanted to learn to read and write English to be able to read newspapers or write letters, still felt somewhat unsatisfied even if his teacher acknowledged that he did, in fact, achieve his original goals. Students somehow wanted to do more. GED students who passed their GED test, their goal, often felt that they were really still under educated compared to other high school graduates or compared to their own definitions of being educated.

The Experiment appeared to meet those needs of students who felt unfulfilled educationally even after objectively reaching personal goals. After participating in reflective lessons, students had a feeling of being really educated and coming closer to actually achieving academic goals. Many believed that their educational experience was becoming broader and more meaningful in many instances. Reflective materials and discussions about them were additionally important in meeting students' goals because of the noticeable improvements students made in developing their communicative skills. Though this helped GED students, changes in basic students were even more apparent. Students themselves related their communication skill progress directly to their reflective materials and their experiences in dealing with them. Individual evaluation sheets compiled by teachers also take this into account. The Experiment therefore figured importantly in the students' and teachers' definitions of the personal goal achievements of students. This is revealed in comparing control group evaluation sheets with those of the experimental group. Examples of each are in the Appendix to this report. While control group teachers noted progress in terms of tasks and ABE skills primarily, experimental teachers accounted for progress also in terms of reflection and broader educational goals.

In terms of observed goals that were achieved, a total of 30 students took the GED test and passed it or were awaiting results by the end of May. Another 36 students planned to take it upon completing the program in June.

Naturalization students also had distinct, observable goals. All but a few naturalization students attained their citizenship goals by the end of May.

Summary

In general, it is possible to say that the Experiment at Butte was a successful program. Both reflection aims and interaction aims were implemented and met during the course of the program. In fact, even many control group teachers were able to implement in their lessons most of the interaction aims called for. The area which suffered from the introduction of The Experiment was the general teaching community. Divisions occurred within this community when The Experiment gained momentum. As indicated previously, these divisions might have been avoided with more staff meetings and further preservice training. The community of experimental teachers became increasingly strong, however, and developed into the kind of teaching unit which Tussman recommended in his book. The Experiment did not begin at the start of the program as originally intended due to numerous problems that were described, but in the end it was successfully accomplished. Problems in the program were crucial and important events in that they provided rich data for the recommendations developed concerning the program. These recommendations are presented in the following section.

RECOMMENDATIONS CONCERNING THE TRANSFERABILITY OF THE EXPERIMENT

During the Experiment at Butte, project personnel learned many things from their successes and failures. This knowledge, according to the experiences in The Experiment, would seem to be essential for program planners to know in instituting future programs based upon similar principles as the Butte experiment. This section presents certain major recommendations and suggestions for the development of these future programs. If the Experiment at Butte is to be transferred to other cities or reestablished in the Butte adult education program, these recommendations will be crucial to note and follow in order to avoid many of the major problems encountered by the Experiment at Butte personnel in starting this kind of project. Recommendations concerning the appropriate kinds of students to include in the program, ways to group teachers and students, administration of the program, preservice and inservice training, staff meetings, the use of teacher aides, and funding suggestions are included.

Appropriate Kinds of Students and Suggestions for Grouping Them

Kinds of students to include. If The Experiment were transferred to another city or if it were reestablished in Butte, there are certain points to take into account concerning the appropriate kinds of students to include in the program and ways to group them once they are recruited.

First of all, both basic students and GED students are appropriate to include in the experimental program. In the Experiment at Butte, teachers demonstrated that students at both levels could handle and benefit from having reflective skill learning and ABE skill learning included in their lessons. Of course, not all students enjoyed or liked these kinds of lessons and preferred, instead, to have exclusively skill-oriented lessons. They should not be expected to continue experimenting under those circumstances. Therefore, early in the program, teachers must sort out likely experiment candidates from these other, skill-oriented students. To do this, students should be informed about The Experiment while being recruited to test their initial interest in using reflective materials. If certain students show even minimal interest or curiosity about The Experiment, they should be placed on either basic or GED experimental teams and informed as to the possibilities of their leaving the experimental teams and transferring to skill-oriented teams should they find that they dislike devoting part of their lessons to reflective activities. If the same general kinds of students exist in other cities as in Butte where four types of students were discovered, this suggests that the ABE program should be prepared to provide for these students, since all of them probably will not like to participate in the reflective-skill program. There will, in fact, be students who will find that they are more suited for a skill-oriented program, for example. Suggestions concerning the nature of such a program designed to accommodate the various types of ABE students are presented in the final section of this chapter. Slow learners seem to require a special education program or a teacher trained in skills that are successful in dealing with these kinds of students. They must also be accommodated when they are found in a program. Of primary importance in initially assigning students to experimental teams or nonexperimental teams is that the student must be informed about the alternatives open to him and that teachers must actually "try out" reflective materials with the student at early meetings before deeming him a likely or unlikely experiment candidate. In the Experiment at Butte, teachers' preconceived notions about their students' desires and abilities to reflect prevented their starting to add reflective skill learning to lessons until later in the year and stopped them from including among reflective students some adults who might have liked and gained from those kinds of experiences, but were not given the opportunity. In future programs, operating according to faulty preconceptions has no place.

In general, dividing teachers into basic and GED teams is worthwhile. Lesson planning is made easier and less time-consuming. Teachers have more time to devote to their students and to their teaching community as a result. Therefore, in a program such as the Experiment at Butte there should be teachers who deal only with basic students and teachers who deal exclusively with GED students. As indicated, a special teacher or part of the program might also be devoted to slow students or unteachables. To initially place students on GED teams or basic teams, information sheets, such as those used in Butte, are useful to employ. On them, students state personal information, plus their education level determined by the number of years of schooling they completed in a regular school system.

Grouping procedures. Once students are assigned to their initial teams, teachers should contact them in their homes to determine their needs, interests, goals, and peculiar problems by interviewing them and testing them formally or informally. If placed on a reflection-oriented team, teachers should explain reflective skills more fully, discuss the topics each student might like to explore, and answer any initial questions concerning reflection or the program in general. Also from the start, teachers should inform students of the possibilities of being grouped in order to prepare the student to do so. The discussion of successful grouping techniques in preceding chapters recounted specific ways to handle this. It is important for students to be prepared for grouping early in the program and to be informed about the benefits of a small group situation. Immediately, teachers should group students who are ready and whose free times for lessons match the free hours of other students with similar education levels, needs, and interests. Within one or two months, teachers should try to have all students in small groups, including students who lacked the confidence or the skills to participate in any groups at first. After this time, students seem to become too attached to having individual instruction only and more strongly resist grouping endeavors.

Because of limitations in teachers' time, tutorials should be arranged whenever necessary at the students' request or when teachers feel a student needs special help to participate in his group. They should not be the regular form of instruction if students can be grouped instead. Some mothers with children at home or persons with serious disabilities are examples of the kinds of students who may not be able to leave their homes or hold group meetings in them. From grouping experiences in the Experiment at Butte, it appears that small group instruction still allows individual instruction, informality, close teacher-student associations, and a relaxed learning environment which are also characteristic of tutorial encounters. Grouping students would not, therefore, detract from the program, but would be an advantage to it. The assets of the students' learning from one another were discussed previously.

Because students sometimes must be reassigned to other teams due to problems with determining their correct skill levels or assigning them to the most suitable reflection-oriented or skill-oriented teams, a program must provide as a matter of policy the flexibility for students to switch groups and teams. In the Experiment at Butte, this kind of flexibility existed on a very small scale and only for a few students. The program policy did not account for routine switching. Teachers often thought of their students as "their own" and were reluctant to have them transfer. A program policy calling for routine transfers might eliminate these kinds of problems and would encourage flexibility. Teachers should stress that students have this option and that taking advantage of it would not reflect upon the teacher in any way.

This section presented suggestions about placing students and grouping them within teams. Suggestions for administration are included next.

Creative Administration

The kind of administration demanded by a program such as the Experiment at Butte may be called "creative administration" in that the administrator who works most closely with teachers must have the freedom to shed traditional administrative authority in order to really meet the needs of the program. As in the Experiment at Butte, there should be a program director, who oversees the program as a whole, and a program coordinator, whose job involves integrating and meeting the specific needs of each of the program divisions: GED and basic teams and reflective and skill teams, for example.

The program director should be the administrator who takes care of the various survival problems of the program which involve handling financial duties and public relation efforts that effect the life of the program; making sure that office space is available for personnel; participating in hiring the teaching personnel; and acting as a liaison between the educational program and other programs and agencies.

The program coordinator, on the other hand, should not be concerned with these survival problems. Instead, his administration should be creative and directed toward insuring the growth and development of the program from within. During the Experiment at Butte this kind of administration was accomplished only to a very small extent. However, events in the program indicated the need for such administrative creativity. There are several recommendations for creative administration that were suggested by data as being necessary in establishing a healthy program of this nature.

Of primary importance is that, like the director, the coordinator should have a firm grasp of the conceptual scheme of the program. He must be clearly familiar with the philosophy of the program and must know exactly what is to be done in each group to implement that philosophy. Without this knowledge he will not be able to provide the leadership and assistance crucial to the growth of the program. Secondly, the coordinator of such a program must shed his authority as a traditional administrator and work closely with teachers and students by frequently attending lessons, talking with students, and trying to share their experiences. He should avoid being placed on a pedestal in the program. Instead, he should become one with teachers and students in the educational community. By doing this, a coordinator can discover first hand the needs of individual teachers and their students, needs of various parts of the program, and the requirements of the program as a whole. It would help him in coordinating parts of the program and in anticipating problems. It would provide him with information to relate to the program director and to consultants to make their interventions more effective. The coordinator must also possess decision-making and leadership abilities which are necessary in handling such a program. His acting as a guide or leader and not as a traditional authority figure is important. It is his responsibility to be an action initiator to "get the project going," to maintain its development, and to insure that the program philosophy is actually being implemented.

The addition of reflection-oriented and skill-oriented teams in a program based on the Tussman philosophy require a further extension of the coordinator's creativity. A team administrative spirit must be maintained with the teachers in reflection-oriented groups, which involves even greater sharing of ideas and authority. Consultants and evaluators or any other outside personnel should be drawn fully into this educational community.

To insure the success of a program like the Experiment at Butte, creative administration is essential. Personnel selected to direct or coordinate such a program should be familiar with and prepared to implement this philosophy of creative administration.

Preservice and Inservice Training

In the Experiment at Butte, personnel learned that high quality preservice and inservice training was essential to the life of the program. This facet of the project was described in the preceding chapters which also pointed out the strong points and failures of these endeavors. Personnel concluded that a longer preservice training program and more regular inservice training sessions would be useful in implementing another program like the Experiment at Butte.

Preservice training. In starting a program based upon the philosophy of the Experiment at Butte, much time should be devoted to an in-depth preservice training program patterned along the lines of the preservice program suggested in the original proposal of the Experiment at Butte. Preservice sessions can be held by consultants, teachers, and outside speakers, depending upon the area of expertise called for at a particular session.

The goals of preservice training are to completely familiarize teachers and administrators with the philosophy and goals of the program and to inform them of the specific actions that are expected of them while they participate in the program. Preservice sessions should clarify preconceptions and refute misunderstandings at the start to avoid their hurting the program during its development.

Experiences in the Experiment at Butte indicated that preservice training should cover a wide range of topics and should deal with them at length. In selecting topics it is important that persons handling preservice training do not assume that program personnel already understand the nature of the program. Making such assumptions led to inadequate preservice sessions in the Experiment at Butte, which failed to convey to personnel the exact philosophy of the program. Sessions did not deal with many of the misunderstandings or preconceptions which teachers and administrators held. These became detrimental to the program and delayed its start. In future programs this must be avoided.

There are certain topics which are necessary to cover in a preservice training program before the project is underway. To begin, the concept of the program and its philosophy and aims must be clearly explained. The Tussman approach should be discussed in detail, assuming that teachers know very little about it. In doing this, teachers are informed of what is expected of them. It is important to tie the program philosophy to specific methods to use with students. Preservice trainers thereby show why and how to use specific kinds of materials, such as reflective humanities materials in lessons with students. They should show teachers exactly how to coordinate ABE skills with reflective skills to insure lesson continuity and to help them convey to students the idea that reflective materials are related to the central focus of their work. Another point to include in preservice training is an explanation of how and why to bring students into groups. The best methods to use should be explained, noting the importance of the attitudes of teachers in grouping.

Explaining ways of teaching adults is another crucial topic to include in preservice training. Since many adults resent being treated as children, all teachers must be prepared with methods of treating them as adults and drawing upon their adult life experiences. Other topics for such training suggested by teachers were the art of questioning and methods of teaching English as a second language. Both seem to be vital for teachers to know when teaching in an adult education program.

Inservice training. Because an extensive preservice training period is called for, inservice sessions should be used to augment preservice topics and to meet specific problems discovered in the course of project growth. Inservice sessions should be arranged at regular intervals throughout the year. Group meetings are best for most inservice meetings, but teachers' individual conferences with consultants seem to be beneficial also to the part of the program designed to incorporate reflective skills. Teachers on skill-oriented teams should not be excluded from inservice sessions as they, too, can benefit from sessions pertaining to reflective concerns. Also, some inservice sessions dealing with matters of interest to skill teachers and to the teaching community as a whole would seem to be worthwhile.

Counseling training. Another area in which teachers in a prospective adult education program need training is in counseling. As indicated in Chapter Four, teachers in a program like the Experiment at Butte have many opportunities to engage in counseling. They often may be called upon to do so by students and should therefore be equipped to handle these encounters. Counseling training may be included easily in preservice or inservice training. Teachers, of course, should not be expected to engage in extensive counseling, but should be informed about basic counseling information. Two areas seem to be the most important to include in counseling training. They should be instructed as to how to be good listeners and should be informed of the resources in their community that are available so that they can act as reference persons to students. It appears that teachers who meet students as friends in their homes or in other informal circumstances have many such referral opportunities.

The use of consultants. If the experimental program is replicated, consultants who have training in the humanities and experience with adult education should be brought into the program and defined as important resource persons who can provide help to teachers in handling reflection in their lessons, in dealing with certain kinds of students, in integrating reflective and skill materials, and so on. From the beginning, consultants' roles should be made completely clear to program participants. They should not have to be action initiators. When consultants make in-service training visits they should come to augment and assist an already developing program.

Consultants need to work closely and frequently with individual teachers and administrators in order to better meet the needs of the program. According to consultants:

> Only where the various experimental aspects of such a program are constantly and continuously the subject of consideration will their initiation become a natural, rather than an external or artificial, event.

Meetings

If the Experiment at Butte were transferred to another city, there are certain recommendations concerning meetings that are important to note.

In the Butte program there were two kinds of meetings which seemed to be important in program development: general staff meetings and experimental meetings.

Regular general staff meetings should be frequently held throughout the year, possibly as often as every two weeks. These meetings help to keep communication lines open between various parts of a diversified program, inform teachers about events in the program, and provide problem-solving occasions. They are therefore essential to developing a strong teaching community.

Experimental meetings, like those described in Chapter Three, must be held weekly and should begin when the project begins, not months later. They are important, as indicated, in the reflection-oriented part of the program and in building a strong, sharing community of reflective teachers.

The Roles of Aides in the Program

In the Experiment at Butte teachers and teacher aides were paired into teams, which met together daily. There were few teachers and many students. As a result, teacher aides took on the teaching responsibilities which teachers could not handle because of their large student loads. Some teacher aides seemed to deal with their teaching duties quite successfully while others realized that they lacked the skills necessary to do well at this job. Teachers spent much time at their morning office encounters preparing the aides to teach. The teacher-teacher aide association was already described. Its effects on the general teaching community were pointed out. A new program utilizing teacher aides should find ways to avoid decreasing interaction between teachers once aides enter the program and ways to give the aides responsibilities befitting their capabilities. The new program must take into account that the roles of teacher aides in the experimental, or reflective, portion of the program are not the same as in the skill, or control, parts of the program. In dealing with students, aides seem much more useful in the skill-oriented program than in the reflective program. Some were not able to handle reflective materials. With these needs in mind, recommendations can be made pertaining to their appropriate roles and training.

First, teacher aides should attend all learning sessions, such as inservice and preservice training meetings. Additionally, inservice training designed for teacher aides as a group might be instituted periodically to augment the other sessions and to present training concerning their work as teacher aides specifically. In the Experiment at Butte, teachers often carried out inservice training for aides daily during their morning hour-long meetings. This task should not be left up to the teachers on an individual basis since it takes time and a great deal of preparation. This also would provide an opportunity for aides to discuss the problems they encounter in being aides.

A second recommendation is that aides should be considered program aides, not teacher aides. Aides to the program should not be assigned to a single teacher. Instead, they might be assigned to assist a group of skill-oriented teachers or a group of reflective teachers. Their duties as aides to the program would involve less contact with students. They would do the necessary clerical work for a group of teachers, such as typing their instructional materials and correcting students' workbooks. An additional important role would involve their becoming program "researchers." That is, aides could assist teachers by looking for materials for their students and researching topics encountered in materials, especially reflective materials, to supply teachers with background information. Arranging field trips or other informal meetings for students and teachers, providing transportation for students, or engaging in baby sitting activities to allow some students to leave their homes to participate in groups are among other important activities for aides to the program.

In the skill-oriented part of the program a few aides might be called upon at times to become teaching aides to handle some of the teachers' tutorials whenever students need extra drills or practice in workbooks. Only the most skilled and qualified aides would be requested to take on these extra duties. Program aides assigned to reflective groups of teachers would have little contact with students, but would have important duties as researchers.

Aides can therefore be assets to an adult basic education program. The numerous activities available for program aides allow flexibility and provide for persons with varying competencies and skill levels.

Funding

Finally, program personnel learned that the development of an educational program like the Experiment at Butte cannot be accomplished in a single year. One year is too short a time to really "try out" The Experiment, solve problems, make adjustments, train teachers and gain momentum. To really be effective, The Experiment needed at least an additional year since by April, May, and June the experimental part of the program was really underway but was not given the opportunity to develop fully. One-year funding for such a program is therefore not adequate.

The effects of temporariness are felt elsewhere and were described in the preceding chapters. This leads to the recommendation that other sources of longer-range funding should be found for this kind of program to allow for its growth and development.

Summary

These recommendations for transferring the Experiment at Butte to other cities dealt with areas of major importance to the life of the program. If these specific areas were neglected in the Experiment at Butte, the program seemed to suffer. The recommendations and suggestions that were included in this section are, therefore, intended to be used as important guidelines for implementing possible future programs based on the philosophy of the Experiment at Butte.

ALTERNATIVE ROUTES TO ABE: A FOUR-TRACK PROGRAM

The experiences of the Experiment at Butte suggested the numerous recommendations made in the preceding section. They also pointed out a final, ultimately important recommendation: the development of a new kind of ABE program to meet the needs of many kinds of potential adult students not ordinarily accounted for in conventional adult education systems. The new program that is recommended is designed to make provisions for people interested in joining a conventional adult education program to learn ABE skills in order to move into jobs in the community. It is also designed to accommodate other kinds of adults who have different educational interests and needs. The program provides for slow learners who need adult special education instruction, for people who need to learn basic skills useful in getting through the day, for adults who want to develop their reflective skills for self-improvement reasons, and for persons who simply want to learn more about themselves in a broader, more liberal kind of education program. These latter students are not specifically interested in ABE skill development phases of adult education.

The new program described in this section was indicated strongly by the typologies of teachers and students in the Experiment at Butte. It is intended to satisfy the needs and interests of each type. Suggestions for the new program ultimately stress educational pleuralism and flexibility in program design and implementation and in the development of the ABE curriculum itself. A four-track adult education program is therefore proposed to provide adults with alternative routes to adult basic education. Basic and GED distinctions are made in each track since they seem to be worthwhile ways of organizing students and assisting teachers. The four tracks are described below.

A Track for Slow Learners: Adult Special Education

In the proposed adult education program is a special education track that is intended to meet the needs of students classified by teachers as slow learners or unteachables, who seem to require special teaching methods to develop their capacities to the fullest extent.

Teachers in the Experiment at Butte felt unprepared to deal with these students effectively. If taught by a person trained in special education methods, these students may not be actually unteachable and would be able to make visible progress. These students are usually basic students (except for slow learners who are GED students) and need to learn ABE skills to help them cope with their daily lives. They find that simple mathematics, reading, speaking, and writing skills are useful in meeting ordinary encounters, such as knowing how to read prices of items for sale, using a telephone, preparing grocery lists, or even signing their names. The other characteristics of slow learners and unteachables were described in Chapter Four.

To implement the special adult education track in a program the size of the Experiment at Butte, at least one teacher is required. This teacher should be skilled at adult education and informed about the various special education methods. If a special education teacher is not available, other interested teachers should be recruited to handle this track and provided with a fairly in-depth preservice training program to inform them of special education methods. Special education inservice training should be made available to them during the year to help them deal with particular problems. They should also be instructed as to how to deal with these slow learners as adults, not children, to maintain their interest at lessons.

The Streamlined Track

A second proposed track in the recommended education program is a track designed for skill-oriented students and teachers. This track is divided into two distinct sections: GED and basic.

Particular traits of this track which make it distinct from other tracks are that it is a streamlined program designed to teach skills to students in as concise and fast a way as possible. The GED part of the track is geared to helping students pass the GED test. Essential knowledge to that end is included in lessons. The basic part is intended to present ABE core skills to students. It includes, then, basic mathematics skills and basic communicative skills.

For students who find other programs too slow or too inclusive to suit them this kind of streamlined program is indicated. It would satisfy their needs for adult education and would possibly prevent highly skill-oriented students from terminating their studies because of program features they call "nonessential."

The Combined Track

The third track in the four-track program is a track designed to give students the opportunity to learn both ABE skills and reflective skills without excluding one in favor of the other. This track is similar to the experimental program in the Experiment at Butte. Again, as in other tracks, there would be a GED level portion of the track and a basic portion.

This track suits both teachers and students who realize the necessity to learn core ABE skills, but who do not want to neglect the development of other facets of the minds and reflective capabilities of students. In this sense, they are committed to the Tussman philosophy of education.

The Experiment at Butte gave strong, positive evidence concerning the possibilities of developing such a track and illustrated the apparent need for providing this kind of educational experience. The guidelines set forth for implementing the experimental part of the Experiment at Butte are useful for the combined track. Teaching procedures and recommendations intended for that program are applicable. They were described earlier in this report.

The Nonskill Track

The final track suggested for the new program is a nonskill track designed to handle nonskill students. As indicated in Chapter Four, there are two kinds of nonskill students: reflective students and students who need to learn basic health or nutritional information. The nonskill track of the program must therefore be divided into three subtracks. They include a GED-level reflective program, a basic-level reflective program, and a basic health-nutrition program.

The GED and basic reflective portions of the nonskill track are intended to be geared to reflective students as described in the typology of students in Chapter Four. These students are not really concerned with learning ABE core skills for various reasons, but they feel that their lives are lacking in education. They therefore see a need to participate in an adult education program simply to improve themselves. Others are interested in the nonskill reflection program because they want to learn more about themselves as persons, which is a development of reflection. Some others enjoy a reflective lesson because it affords the time to practice and refine communicative skills, such as improving speaking ability or discussing topics with other persons, while working on materials not typical of adult education programs.

In a new program of the same size as the Experiment at Butte, one or two wholly reflective teachers may be adequate to handle the number of reflective students.

The basic health-nutrition track would provide education for students who want and need to know information concerning diet planning for their families, caring for children, maintaining clean, safe living conditions, and dealing with health problems, among others. Teachers who go into homes can easily see, in many cases, where such learning might be essential. For a time, students may be placed in this track to meet these needs. They may choose to make use of the other tracks after or during their participation in the basic health-nutrition track. Teachers in the Experiment at Butte saw many instances where taking care of such basic living needs at first would have benefited a student in his other educational endeavors. Such a track is therefore indicated to be an important part of this suggested four-track program. Teachers who enter into teaching basic living skills must be offered the kind of training at preservice and inservice learning sessions which would adequately equip them to deal with this kind of subject matter.

Implementing the Four-Track Program

In order to implement the pleuralistic, four-track program, the recommendations made for transferring the Experiment at Butte are applicable. The programs are similar in that they include both ABE skill teaching and reflective skill teaching in various parts of the program. Separate programs are operated in one, general program. Both program formats are unique and are generally geared to meet the peculiar needs of students. The four-track program stresses this in its design even more completely.

The four-track program suggests a similar format of creative administration utilizing a director and a coordinator. In addition, a quasi-administrator in each of the four tracks seems to be required. The quasi-administrator can be selected from among the qualified and experienced teachers in each track. Their authority is derived from this experience. Besides their administrative duties they can engage in part-time teaching in their tracks. The suggested duties which they may perform as administrators are of a team administrative nature in which they find themselves organizing sharing sessions with other teachers in their tracks and making certain that the teachers are implementing the model of their tracks in ordinary lessons. They should not expect to be involved in a formal chain of command since this kind of organization does not suit such an educational endeavor. Instead, they must work informally to bring the coordinator and teachers to a close working relationship. Also, they should make certain that they keep channels of communication open between tracks by continually fostering a teaching community spirit with the teachers in all tracks. Having quasi-administrators who are informed about the developments in their tracks is intended to help the coordinator to meet his responsibilities.

Grouping flexibilities are especially necessary in the four-track program. A student must feel free to move from one track to another if his originally-assigned track is not suitable for him. As recommended for the Experiment at Butte, switching teams and switching tracks should be an expected and encouraged part of the program.

Preservice and inservice training recommendations for the four-track program are also the same as suggestions made for the Experiment at Butte. These learning programs should handle the particular needs of each track. Throughout the year, all teachers must be completely informed of the activities in all of the tracks. Frequent preservice and inservice training sessions and regular staff meetings must provide this information and keep communication between and among tracks at a maximum level. Within tracks, meetings similar to the weekly experimental meetings in the Experiment at Butte should be started as soon as the program begins and held regularly throughout the year.

Summary of the Four-Track Program

The four-track program, then, is the kind of program which was suggested by the many outcomes of the Experiment at Butte. It is designed to accommodate the kinds of students and teachers discovered to be participants in the Butte program in order to fully satisfy their educational interests, goals, and needs. It makes use of the many recommendations proposed for transferring the Experiment at Butte to other cities and draws upon the knowledge about ways to meet specific reflection and interaction aims, which were discussed at the beginning of this chapter. These aims were found to be worthwhile to accomplish in developing an education program for adults.

A SUMMARY OF THE EXPERIMENT AT BUTTE

The Experiment at Butte was a demonstration project designed to determine the effectiveness of using the Joseph Tussman education model in an ABE program. Its purpose was, therefore, to combine in lessons the teaching of reflective skills with the teaching of ordinary core ABE skills, such as basic or GED computational and communicative skills. In addition to reflection aims, the project sought to meet certain other instructional aims. These provided for drawing students into small education groups and making changes in interactions among lesson participants in order to foster an informal, relaxed feeling at lessons. In essence, both teachers and students were to become fellow students.

To implement the Tussman model in the Experiment at Butte, six teachers, seven teacher aides, a director, a coordinator, an evaluator, two evaluation consultants, and two humanities consultants were hired as project personnel. Teachers and teacher aides were paired into six teaching teams divided on a GED-basic basis in order to handle the 208 students who subsequently enrolled in the program.

Before the instruction of students began, humanities consultants from the University of Montana conducted preservice training sessions in order to acquaint the administrators and the instructional staff with the nature of the Tussman approach and ways to handle reflective materials during lessons.

For comparison purposes, the teaching teams were then further divided into experimental and control groups. The three experimental teams were to try to implement the Tussman model while the three control group teams were to proceed in their instructions as they had done during the previous year in Project Homebound.

Instructions began on October 4, 1971, after students were recruited, placed with teams, and tested formally and/or informally to determine their skill competencies. At this time, only one experimental teacher tried to implement the Tussman model. Other experimental teachers, because of preconceptions about themselves and their students or because of misunderstandings concerning The Experiment, continued to proceed as if they were part of the control group until December. At this time, an inservice training session was held to clarify notions about the nature of reflection and The Experiment, in general. After this, all experimental teachers began to introduce reflective materials in lessons for their students' consideration in order to develop their reflective skills together with their ABE skills. While working with reflective materials, they shaped the interaction at lessons in ways which encouraged students to reflect.

As a result of the Experiment at Butte, program personnel demonstrated that they were able to implement the Tussman model in an ABE program. The conclusions which can be made concerning the nature of the program are that ABE students are able to reflect and that their reflective capabilities can, in fact, be developed as a part of ABE training. ABE skill learning can be combined with reflective skill learning in lessons. Although The Experiment was not appropriate for all students, using reflective materials appears to be valuable to many in that the materials added interest to ordinary lessons, encouraged students to reflect and question more often in lessons and in their daily lives, and helped to develop their communicative skills, among others.

Once The Experiment actually began, experimental teachers were able to meet in a fairly successful manner both interaction aims and reflection aims. Even control group members naturally met interaction aims. Aims to draw students into small educational groups were partially achieved. Some students continued to receive individual instructions only. Time limitations produced by the one-year nature of the program precluded further development of The Experiment to its fullest extent.

Also revealed in the Experiment at Butte were four types of ABE students: slow learners, skill-oriented students, combined reflective and skill-oriented students, and nonskill students. These diverse types suggest the need for alternative routes to ABE. A four-track program stressing pleuralism and flexibility is proposed to accommodate their needs. Based on experiences in the Experiment at Butte, recommendations for implementing this four-track program are the same as recommendations concerning the transferability of The Experiment. They call for, among other things, an extensive preservice and inservice training program for instructional personnel, grouping flexibilities, and a creative form of administration.

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APPENDIX

EDUCATIONAL MATERIALS AND STUDENT EVALUATIONS

In this Appendix are various kinds of educational materials used by teachers in the Experiment at Butte. The application form used to collect initial information about students, three of the informal diagnostic tests used, and a list of commercially-prepared materials used to teach ABE skills are presented. These items are followed by an index of reflective materials which points out successful or unsuccessful works used, examples of some of those reflective materials, including all materials compiled by consultants, and a list of the films shown to students and senior citizens during the Educational Film Series, 1971-72.

Several examples of the teachers' evaluations of each individual student are also included.

Finally, the six teaching teams prepared their own evaluations of the project. These reports are presented in the last section of this Appendix.

STUDENT APPLICATION

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NAME ______________________ AGE ________ SEX ________

ADDRESS ______________________ TELE. ________________

PLACE OF BIRTH ______________________ STATE OR COUNTRY ________

MARITAL STATUS: NEVER MARRIED ☐ MARRIED ☐ DIV./SEP. ☐ WIDOWED ☐

LAST GRADE COMPLETED IN SCHOOL 0 1 2 3 4 5 6 7 8 9 10 11 12

LOCATION OF SCHOOL ______________________

SPECIFIC EDUCATIONAL GOAL: ______________________

BASIC ______________ INTER ______________ GED ______________

DAYS AVAILABLE FOR INSTRUCTION: MON. TUES. WED. THUR. FRI.

HOURS MOST CONVENIENT FOR INSTRUCTION: ______________________

Would you meet in a home of a neighbor for instruction? ____________

Would you accept others in your home for instruction? ____________

RACE: White ☐ Am. Ind. ☐ Oriental - Other ______________

Spanish Surname: Cuban ☐ Mex.-Am. ☐ Span.-Am. ☐

Date entered ______________ Date Terminated ______________

Reason ______________________

Grade Level: Entrance ______________ Exit ______________

Employment: ☐ Full Time ☐ Part

☐ Unemployed ☐ Not in labor force

Previous ABE Experience: ______________________

____

PHONOVISUAL DIAGNOSTIC TEST

	Words incorrect	Vowel Errors	Consonant Errors Initial	Consonant Errors Final	Blends	Reversals
1.	shape	a-e	sh	p		
2.	teeth	ee	t	th		
3.	while	i-e	wh	l		
4.	zone	o-e	z	n		
5.	cute	u-e	c	t		
6.	sprang	-a-	s	ng	spr	
7.	swept	-e-	s	t	sw pt	
8.	quick	-i-	qu	ck		
9.	flock	-o-	f	ck	fl	
10.	struck	-u-	s	ck	str	
11.	yawn	aw	y	n		
12.	harm	a (r)	h	m		
13.	smooth	oo	s	th	sm	
14.	brook	oo	b	k	br	
15.	growl	ow	g	l	gr	
16.	joy	oy	j			
17.	burst	ur	b	t	st	
18.	wax	-a-	w	x		
19.	drove	o-e	d	v	dr	
20.	church	ur	ch	ch		

TOTAL ERRORS

NOTE: This test was taken from the Phonovisual Diagnostic Test, copyright 1949, Phonovisual Products, Inc.

THE BASIC SIGHT WORD TEST

1.	by	at	a	it
2.	in	I	be	big
3.	did	good	do	go
4.	all	are	any	an
5.	had	have	him	drink
6.	its	is	into	if
7.	ask	may	as	an
8.	many	cut	keep	know
9.	does	goes	going	and
10.	has	he	his	far
11.	but	jump	just	buy
12.	black	kind	blue	find
13.	fast	first	ate	eat
14.	help	hot	both	hold
15.	brown	grow	bring	green
16.	four	every	found	eight
17.	from	make	for	made
18.	around	funny	always	because
19.	long	let	little	look
20.	away	again	after	about
21.	cold	can	could	clean
22.	full	tall	five	fly
23.	before	best	better	been
24.	live	like	laugh	light
25.	her	here	how	hurt
26.	down	done	draw	don't
27.	give	get	gave	got
28.	came	carry	call	come

THE BASIC SIGHT WORD TEST. PART 2

1.	sit	me	to	the
2.	not	of	we	so
3.	red	to	seven	walk
4.	six	start	show	stop
5.	put	round	right	pull
6.	no	on	or	old
7.	yellow	you	your	yes
8.	please	pick	play	pretty
9.	take	ten	they	today
10.	may	much	must	together
11.	own	under	off	over
12.	out	new	now	our
13.	open	one	only	once
14.	try	myself	never	two
15.	us	up	upon	use
16.	with	white	was	wash
17.	shall	she	sleep	small
18.	who	write	would	why
19.	some	very	sing	soon
20.	wish	well	work	will
21.	ran	read	run	ride
22.	then	tell	their	them
23.	see	saw	say	said
24.	that	there	these	three
25.	when	which	where	what
26.	thank	those	this	think
27.	want	went	were	warm

Oral Reading

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One time I painted our house. I got some good brushes and some good paint. Then I applied the paint with long even strokes. I saved money by painting the house. Usually I can do a good paint job. Can you paint a house?

Henry is a good painter. He uses a paint gun to apply the paint. He has an air compressor to use with the paint gun. He saves time by using the paint gun. He also does a better job by using the paint gun. The paint gun is one of Henry's tools. He says it pays to have good tools. Henry has ladders to use in painting a house. He has short stepladders to use on low walls. Henry saves money by painting his house.

Filling in Blanks

I have a ____________________ where I keep my tools. I have some good _________________________ in my workshop. A good handsaw is a _______________________ tool. The vise is fastened to the _________. I keep the _________________ clean. I keep each tool in its ________.

We have ______________ around our house. The fence is __________ of boards and posts. When a board is broken, I _________________ it. Mary says I am a good repair _______________.

Sometimes a __________________ cord breaks. I always replace the the window ____________________ with a ___________ one. It is _________________________ to replace a window cord if one _____________ how.

One time ____________________ our house. I got some ____________ brushes and __________________ good paint. I saved ___________________ by painting the house. Henry is a good ________________________. He ________________ a paint gun to apply the paint. Can you paint a _________?

Word List

a
about
accident
account
address
adult
afraid
after
afternoon
air
all
also
am
amber
amount
and
another
apply
are
around
asleep
at
authorized
automobile

baby
back
balanced
bank
basket
bath
be
bean
best
because
bell
belong
bench
best
better
bills
black
board
boiling
bolts
book
borrow
bottom
bought
boy
bread
breakfast
breaks
broken
brooder
Brown
brush
bucket
buildings
built
bumper
burglar
buss
but
butter
buy

cabbage
cake
call
can
capital
car
care
carefully
carry
cart
causes
charge
check
chicken
children
church
citizen
city
class
clean
clear
clippers
clothes
coat
coffee
coming
compressor
cooking
corn
corners
could
country
county
crossing
cucumber
cut

danger
date
day
dealer
department
deposit
dessert
dinner
direction
dirt
do
does
down
draws
dresses
dressing
drink
driveway
dry

each
early
easily
easy
eat
elevator
Elizabeth
endorse
enough
equipment
every
extension
extra

failing
fair
family
fast
fasten
feathers
fed
feed
fence
few
figures
find
finds
fine
first
fit
fix
flat
flowers
follow
food
for
found
frame
friend
from
fruit

garage
garden
gas
get
girl
give
glad
go
good
got
government
grass
gravel
greased
green
grocery
grow
gun

handkerchief
handsaw
happy
hard
hardware
has
haul
have
he
hear
heating
help
Henry
her
herself
high
his
hit
hitch
hold
home
house
housekeeper
how

I
if
in
inside
into
is
it

jack
job
Joe
Junior

keeps
kept
kill
kinds
kitchen
know

ladder
ladies
large
larger
last
late

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lawn
learn
left
less
lettuce
light
like
list
listen
little
live
load
long
look
loosen
low
lug
lumber

make
man
many
married
Mary
may
me
meals
measure
meat
men
minister
money
month
morning
mow
mower
Mr.
Mrs.
much
must
my
myself

nailed
name
near
needed
neighbor
new
next
nice
night
not
number
nursery
nuts

of
often
older
one
one
onion
only
other
our
out
over
own

paint
painter
parks
pass
past
pay
pea
people
person
picks
pick-up
piece
place
play
potatoes
preach
prepares
pretty
price
property
proud
push
put

railroad
raise
read
ready
rear
red
remove
repair
replace
rice
roast

safe
safety
salad
sale
sash
Saturday
save
saw
sawed
says
school
scolds
see
select
selected
sell
sermon
several
she
shelf
shirt
shoes
should
shrubbery
signal
signs
slip
slow
small
Smith
smooth
snap
so
socks
sold
some
sometimes
space
spell
spring
stairs
starch
stay
stepladder
store
stories
stove
street
strokes
suits
summer
Sunday
supper
surprise

take
taking
tall
teacher
teller
tells
ten
that
the
their
them
there
they
things
think
this
ties
time
tire
to
together
too
took
tools
total
town
trailer
train
trees
trim
trip
turnips
two

unit
until
up
us
used
usually

variety
veal
vegetable
vehicle
very
vise
visit

wait
wall
wants
warm
was
wash
water
we
week
well
went
were
what
wheel
when
where
while
who
why
wife
will
window
with
woman
women
work
workshop
wrench
write

yard
year
you
your

EXPERIMENT AT BUTTE

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SELECTED READINGS INDEX OF REFLECTIVE MATERIALS*

Materials Prepared by Humanities Consultants

I.	Franz Kafka	from Common Confusion
*(7)II.	Plato	from Georgias
*(3)III.	Ecclesiastes (Old Testament)	from "All is Vanity"
*(7)IV.	Luke (New Testament)	from "The Prodigal Son"
*(7)V.	Hans Christian Anderson	from The Emperor's New Clothes
º(8)VI.	Jean Giradoux	from The Enchanted
º(1)VII.	Chekkov	from The Slanderer
°(3)VIII.	Randall Jarrell	"The Death of the Ball Turret Gunner"
°(5)IX.	John Stuart Mill	from On Liberty
X.	Tina Deatach	"Predator Law Needed"
*(4)XI.	John Stuart Mill	from On Liberty
°(3)XII.	Archilochus	from Greek Lyrics
*(10)XIII.	Praxilla	from Greek Lyrics
*(13)XIV.	Malcolm X	from a speech
*(10)XV.	Plato	from The Republic of Plato
°(1)XVI.	William James	from The Will to Believe
*(5)XVII.	Henry Thoreau	from Walking
*(3)XVIII.	Henry Thoreau	from Walking
*(4)XIX.	Thucydides	from A History of the Peloponnesian War
*(8)XX.	Rachel Carson	from Silent Spring, Secret Spring - "And No Birds Sing"
XXI.	Carl Jung	from Preface to Psyche and Symbol
*(4)XXII.	Ralph Korngold	from Citizen Toussaint
*(4)XXIII.	Black Elk	from The Life Story of a Holy Man of the Oglala Sioux
*(4)XXIV.	Aristotle	from Ethics
XXV.	Thomas Hobbes	from The Leviathan
XXVI.	John Milton	from "Paradise Lost"
XXVII.	John Milton	from "Paradise Lost"
°(1)XXVIII.	B. F. Skinner	from Beyond Freedom and Dignity
°(1)XXIX.	B. F. Skinner	from Beyond Freedom and Dignity
XXX.	Charles Darwin	from The Origin of Species

*Key: () The number of students who read and reacted to readings are indicated by numbers in brackets.
* Good to use as a reflective material.
° Fair
- Not good or too difficult.
No mark indicates that the reading was not used.
Two marks indicate that the material was received differently by various students.

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*(8)XXXI.	E. E. Cummings	"92"
°(2)XXXII.		Haiku (Japanese poetry)
XXXIII.	Richard Brautigan	"A CandleLion Poem"
XXXIV.	Tufu (Chinese poet)	"The Empty Purse"
XXXV.	Isaiah (Old Testament)	"The Lord's Use of Assyria"

Materials Prepared by Experimental Teachers

*(11)	Napolean Hill, Theodore Roosevelt, Lewis Lawes	on "Success"
*(8)	Edward Judson and Anonymous	on "Failure"
*(5)	Alice Cary	on "Character"
*(3)	Author unknown	"Don't Envy Other Folks"
°(1)	Charles Mackay	"No Enemies"
*(14)	an American girl	"Go Out and Multiply"
°(4)	Fra Giovanni	"I Am Your Friend"
*(4)	Author unknown	"Desidarata"
°(6)	F. G. Marshall	"Life"
*(6)	Jake Osteburg	"Life"
*(3)		An Arabic Proverb
*(2)	Ella Wheller Wilcox	"Let Us Give Thanks"
*(3)		"Forecast for the Future"
*(2)	Buson, Joson, Shiki, Basho, Kikuku	Haiku (Japanese poetry)
*(3)	Gyorgy Moldova	"The Day the Bureaucrats Froze Stiff"
*(12)	Arthur M. Schlesinger, Jr.	from "Histories of the Future"
*(6)	Johann Schiller	from poetic works
*(3)		from a biography of Henry Thoreau
*(6)	Samuel Beckett	from "Waiting for Godot"
*°(4)	Thomas Jefferson et al.	Declaration of Independence
*(2)	George Berkeley	on Education
*(2)	Plato	on Education
	Francis Bacon	"Of Studies"
*(11)	Will Rogers	from Wise and Witty Sayings
*(7)	Daniel J. Foley	"Big Boys Win Again"
°(7)	German Arciniegas	"The New Man of America"
°(4)	Gorges Borges	"Borges and I"
*°(6)		"Confucius and the Witty Child"
*°(9)		"Zoning and Consolidation in Butte"
°(4)		"The Spirit of Christmas"
*(5)		"Snuff Grinder's Son"
*(7)	Walter Van Tilburn Clark	from The Ox Bow Incident
*(12)	Compiled by T. C. McLuhan	"A Letter to William and Mary College" from Touch the Earth
*(1)	Rod McKuen	"April 12"
*(12)	Sun Chief	from Touch the Earth

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*(7)	Chief Joseph	from Touch the Earth
*(2)	Gustave Flaubert	from Madame Bovary
*(2)	Plato	The Apology
*(2)	Plato	Crito
*(3)		Enthyphro
*(2)		"Gospel According to Matthew"
*(6)		"Constitution of the State of Montana"
*(2)		"A Sick America"
*(2)		"A Star for Freedom's Banker"
*(4)		Communication: The Transfer of Meaning
*(3)		"Christopher Columbus"
*(3)		"The Burning of the White House"
*(3)		"Henry Hudson"
*(3)		"Reflection"
	Betty Friedan	from The Feminine Mystique

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II. Plato on GOOD OR HARM

When Socrates is talking to Polus in Plato's *Gorgias* 409 b.c. the following exchange of views takes place:

SOCRATES: To act unjustly happens to be the greatest of evils.
POLUS: Isn't it a greater evil to be treated unjustly?
SOCRATES: Not at all.
POLUS: You mean you would prefer to be treated unjustly than to treat another unjustly?
SOCRATES: I wouldn't prefer either; but if it should become necessary for me either to treat someone unjustly or be treated unjustly, I would choose *to be treated unjustly* rather than to treat anyone unjustly.

In a very similar thought Socrates says to the jurors in Plato's *Apology* who have just sentenced him to be executed for exercising his right to express himself that:

> ". . . no evil can happen to a good man, either in living or in dying."

Why does Socrates say that to act unjustly is the greatest of evils?

How is a good man never harmed?

Would you always choose the most just course of action even if it meant hurting yourself? If not, why not?

Is Socrates talking about the importance of "inward peace of mind"?

III. Ecclesiastes on "THE VALUE OF LIVING"

In the *Old Testament* a son of David, an old man, says:

Chapter 1

The words of the Preachers, the son of David, king in Jerusalem
2 Vanity of vanities, saith the Preacher, vanity of vanities; all *is* vanity.
3 What profit hath a man of all his labour which he taketh under the sun?
4 *One* generation passeth away, and *another* generation cometh: but the earth abideth for ever.
5 The sun also ariseth, and the sun goeth down, and hasteth to his place where he arose.
6 The wind goeth toward the south, and turneth about unto the north; it whirleth about continually, and the wind returneth again according to his circuits.
7 All the rivers run into the sea; yet the sea *is* not full; unto the place from whence the rivers come, thither they return again.
8 All things *are* full of labour; man cannot utter *it*: the eye is not satisfied with seeing, nor the ear filled with hearing.

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9 The thing that hath been, it *is* *that* which shall be; and that which is done *is* that which shall be done: and *there* *is* no new *thing* under the sun.
10 Is there *any* thing whereof it may be said, See, this *is* new? it hath been already of old time, which was before us.
11 *There* is no remembrance of former *things*; neither shall there be *any* remembrance of *things* tnat are to come with *those* that shall come after.

Why does the preacher say all these strange things?

Is he happy?

Does he think that the life of a man amounts to anything?

Will he be remembered?

If he is not remembered, will life be worth living?

How is life worth living?

What things in a man's life are especially worth doing?

VI. Jean Giraudoux on TRUTH TELLING

Jean Giraudoux, the greatest French dramatist of the 1930's, wrote his plays in poetical prose. Of his dramas, those produced and published in this country are *The Madwoman of Chaillot*, *The Enchanted*, *Ondine*, and Christopher Fry's adaptation of *Tiger at the Gates*.

In *The Enchanted* a ghost brings justice of an unusual sort to a small town. Petty officialdom, confused by the turn in events, is represented by the mayor; the inspector, who has come to prove the nonexistence of any ghost in *his* territory; and the supervisor of the town, who realizes that normalcy has departed from the village way of life.

From *THE ENCHANTED*

Inspector. I must tell you in all seriousness, the Administrtion considers your report utterly ludicrous. Spirits don't exist. Consequently they don't haunt towns. Not in my district.

Mayor. They haunt this town.

Inspector. Let's not be childish, Mr. Mayor. We know what ghosts are. Ghosts are a mysterious clashing of pots and pans at midnight in an apartment where they want to get the tenants out in order to raise the rent. Ghosts are a walking bedsheet that frightens away the night watchman just before a burglary.

Supervisor. Not in this town, Inspector.

Inspector. No? And just how are you haunted in this town?

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Supervisor. We are haunted by an occult[1] presence which is clearly bent on sapping the foundation of civilized society. I may add, incidentally, that I find myself in complete sympathy with its aims. . . .

Inspector. Really! And by what means is this power sapping the foundation of civilized society?

Supervisor. We don't know the means. But we know the result. Take, for example, the behavior of animals. Formerly, when a man beat a dog, the dog would cringe and lick his hand. Now he bites it. It's the same with the children.

Inspector. They bite their parents?

Supervisor. When children are mistreated, instead of crying and begging pardon, they simply leave the house and refuse to return. As for the women . . . !

Inspector. They've stopped chattering?

Supervisor. Within the last month, our most desperate domestic problems have suddenly been solved -- in the simplest imaginable way. The women have quietly left their husbands and gone off with attractive men.

Mayor. I will add a few details. In the civic lottery, last Sunday, for the first time in history, the big cash prize went to the neediest couple in town, and not as always to Monsieur Dumas, the millionaire. The motorcycle was won by the young captain of the football team, and not as usual by the Mother Superior of the convent. On Wednesday, two people were run over by a motor truck. Not, as you might expect, the youngest and healthiest of our citizens, but the oldest and most decrepit -- who happened to be also the stingiest and most venomous. You see what is happening? For the first time in the memory of man, fortune is displaying some intelligence, and chance seems to know what it is about.

Inspector. What you are describing, my friend, is the nullification[2] of human liberty.

Doctor. While you're on the subject, Mr. Mayor, you might say a word about the census returns.

Mayor. I must confess I haven't had the courage to send in the forms, Inspector.

Inspector. Your constituents have been telling lies, have they?

Mayor. Quite the contrary. They have been telling the truth in so outrageous a manner that it amounts to indecency. Under section two, for instance, instead of giving the names of their children, many of them insist on putting down the names of cats, dogs, birds, and even rubber plants -- the things they really love and consider part of themselves.

Inspector. They're mad.

Mayor. Under "name of spouse," they put down the names of movie stars, heroines of romance, and even occasionally the name of an automobile or boat.

Inspector. And how long have these scandals been going on?

Mayor. Since the ghost appeared.

What is the effect of the ghost upon the town?

---

[1] occult: mysterious or obscure.

[2] nullification: destruction or annihilation.

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Do you think the town in the play is "falling apart?"

What does the mayor mean when he says that truth telling in the town is outrageous?

What does honesty reveal about the people in the town?

VIII. Randall Jarrell on WAR

The Death of the Ball Turret Gunner

From my mother's sleep I feel into the state
and I hunched in its belly till my wet fur froze.
Six miles from earth, loosed from its dream of life,
I woke to black flak and the nightmare fighters.
When I died they washed me out of the turret with a hose.

What is a ball turret?

Why did Jarrell write this short piece?

How does it make you feel about war? About how men are treated in war?

IX. J.S. Mill on THE PROBLEM OF GOOD OR HARM AND THE RESPONSIBILITIES OF THE COMMUNITY

John S. Mill, a famous political thinker of the last century said in his reflections about government in his well known book, On Liberty that:

> "The object of my essay is to assert one very simple principle . . . That principle is that the sole end for which mankind are warranted, individually or collectively, in interfering with the liberty of action of any of their number is self-protection. That the only purpose for which power can be rightfully exercised over any member of a civilized community, against his will, is to prevent harm to others. His own good, either physical or moral, is not a sufficient warrant. He cannot rightfully be compelled to do or forbear because it will be better for him to do so, because it will make him happier, because, in the opinions of others, to do so would be wise or even right."

Why shouldn't government try to bring about man's good?

What are the kinds of harm which you think the government should prevent?

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XI

From John Stuart Mill, On Liberty:

> ". . . Wrong opinions and practices gradually yield to fact and argument; but facts and arguments, to produce any effect on the mind, must be brought before it. Very few facts are able to tell their own story. The whole strength and value of human judgment depends on the one property, that it can be set right when it is wrong. . . ."

1) What does Mill mean that "wrong opinions and practices gradually yield to fact and argument?"

2) Does this reading explain the idea of freedom of speech?

3) How can free speech be good not only for individual citizens but also good for a government?

XII

From Greek Lyrics, translated by Richmond Lattimore

Archilochus was a Greek poet living 650 B.C. This poem is about a mercenary.

> Some barbarian is waving my shield, since I was obliged to
> leave that perfectly good piece of equipment behind
> under a bush. But I got away, so what does it matter?
> Let the shield go; I can buy another one equally good.

1) What is a mercenary?

2) To the Greek soldier, equipment (swords and shields and battle dress) was very important to a man. Why do you think this might be the case?

3) What does the soldier in the poem reveal about his attitude toward equipment? His profession? heroism?

4) Compare this poem with the poem in Reading VIII about World War II.

XIII

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From Greek Lyrics, translated by Richard Lattimore

Praxilla was a Greek poet around the fifth century.

> Loveliest of what I leave behind is the sunlight,
> and loveliest after that the shining stars, and the
> moon's face,
> but also cucumbers that are ripe, and pears, and apples.

1) Would you call the poem personal or objective?

2) What does the poet love?

3) Judging from this poem and the one by Archilochus, would you say that we have anything in common with the ancient Greeks?

XIV

This reading is taken from a speech given by Malcolm X, a black leader, who was assassinated in the late 1960's.

> ". . . This is one of the things that our people are beginning to learn today--that it is very important to think out a situation for yourself. If you don't do it, you'll always be maneuvered into a situation where you are never fighting your actual enemies, where you will find yourself fighting your own self."

1) What, basically, is Malcolm X saying here?

2) Is it possible for any person to be struggling with himself when he thinks he is really struggling with an outside problem? For example, discipline problems at home, in schools? Family arguments?

3) How does what Malcolm X says here compare with what John Stuart Mill said regarding the examining or reviewing of facts and practices? (Reading XI)

4) Do you think they are saying basically the same thing? Or something different.

XV

From The Republic of Plato, trans. with introduction by Francis MacDonald Cornford:

Plato's Myth of the Ring:

". . . Now the easiest way to give men that complete liberty of action would be to imagine them possessed of the talisman found by Gyges, the ancestor of the famous Lydian. The story tells how he was a shepherd in the King's service. One day there was a great storm, and the ground where his flock was feeding was rent by an earthquake. Astonished at the sight, he went down into the chasm and saw, among other wonders of which the story tells, a brazen horse, hollow, with windows in its sides. Peering in, he saw a dead body, which seemed to be of more than human size. It was naked save for a gold ring, which he took from the finger and made his way out. When the shepherds met, as they did every month, to send an account to the King of the state of his flocks, Gyges came wearing the ring. As he was sitting with the others, he happened to turn the bezel of the ring inside his hand. At once he became invisible, and his companions, to his surprise, began to speak of him as if he had left them. Then, as he was fingering the ring, he turned the bezel outwards and became visible again. With that, he set about testing the ring to see if it really had this power, and always with the same result: according as he turned the bezel inside or out he vanished and reappeared. After this discovery he contrived to be one of the messengers sent to the court. There he seduced the Queen, and with her help murdered the King and seized the throne.

Now suppose there were two such magic rings, and one were given to the just man, the other to the unjust. No one, it is commonly believed, would have such iron strength of mind as to stand fast in doing right or keep his hands off other men's goods, when he could go to the market-place and fearlessly help himself to anything he wanted, enter houses and sleep with any woman he chose, set prisoners free and kill men at his pleasure, and in a word go about among men with the powers of a god. He would behave no better than the other; both would take the same course. Surely this would be strong proof that men do right only under compulsion; no individual thinks of it as good for him personally, since he does wrong whenever he finds he has the power. Every man believes that wrongdoing pays him personally much better, and, according to this theory, that is the truth. Granted full licence to do as he liked, people would think him a miserable fool if they found him refusing to wrong his neighbours or to touch their belongings, though in public they would keep up a pretence of praising his conduct, for fear of being wronged themselves. So much for that."

1) Would all men act wrong if they knew they would not be discovered? Why? Why not?

2) Do men do right because they are forced to?

3) Do you agree with the final paragraph?

4) Compare this with reading II.

XVI

From William James, The Will to Believe

"In Pascal's Thoughts there is a celebrated passage known in literature as Pascal's wager. In it he tries to force us into Christianity by

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reasoning as if our concern with truth resembled our concern with the stakes in a game of chance. Translated freely his words are these: You must either believe or not believe that God is--which will you do? Your human reason cannot say. A game is going on between you and the nature of things which at the day of judgment will bring out either heads or tails. Weigh what your gains and your losses would be if you should stake all you have on heads, or God's existence: if you win in such a case, you gain eternal beatitude; if you lose, you lose nothing at all. If there were an infinity of chances, and only one for God in this wager, still you ought to stake your all on God; for though you surely risk a finite loss by this procedure, any finite loss is reasonable, even a certain one is reasonable, if there is but the possibility of infinite gain. Go, then, and take holy water, and have masses said; belief will come and stupefy your scruples,--Cela vous fera croire et vous abetira. Why should you not? At bottom, what have you to lose?

You probably feel that when religious faith expresses itself thus, in the language of the gaming-table, it is put to its last trumps. Surely Pascal's own personal belief in masses and holy water had far other springs; and this celebrated page of his is but an argument for others, a last desperate snatch at a weapon against the heardness of the unbelieving heart. . . ."

1) What is Pascal's wager?

2) What is James' comment on the nature of Pascal's wager, in the second paragraph?

3) Why do you think Pascal said what he did?

4) Do you think Pascal is right or wrong?

XVII

From Walking by Henry Thoreau.

"I love even to see the domestic animals reassert their native rights--any evidence that they have not wholly lost their original wild habits and vigor, as when my neighbor's cow breaks out of her pasture early in the spring and boldly swims the river, a cold, gray tide, twenty-five or thirty rods wide, swollen by the melted snow. It is the buffalo crossing the Mississippi. This exploit confers some dignity on the herd in my eyes--already dignified. The seeds of instinct are preserved under the thick hides of cattle and horses, like seeds in the bowels of the earth, an indefinite period."

1) What does Thoreau mean here by "dignity"?

2) Do you think Thoreau is right? What else could you add to his idea of "dignity"?

3) Is Thoreau warning against anything here?

XVIII

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From Walking by Thoreau:

"Many a poor sore-eyed student that I have heard of would grow faster, both intellectually and physically, if, instead of sitting up so very late, he honestly slumbered a fool's allowance."

1) What does Thoreau say here about "burning the midnight oil"? Is the fool really a fool?

2) Do you think Thoreau is a good observer of human nature?

3) Do you think there might possibly be an exception to Thoreau's common sense idea of what is good for a person?

4) Compare this with reading I.

XX

From Rachel Carson, Silent Spring

And No Birds Sing

Here in our village the elm trees have been sprayed for several years [she wrote in 1958]. When we moved here six years ago, there was a wealth of bird life; I put up a feeder and had a steady stream of cardinals, chickadees, downies and nuthatches all winter, and the cardinals and chickadees brought their young ones in the summer.

After several years of DDT spray, the town is almost devoid of robins and starlings; chickadees have not been on my shelf for two years, and this year the cardinals are gone too; the nesting population in the neighborhood seems to consist of one dove pair and perhaps one catbird family.

It is hard to explain to the children that the birds have been killed off, when they have learned in school that a Federal law protects the birds from killing or capture. "Will they ever come back?" they ask, and I do not have the answer. The elms are still dying, and so are the birds. Is anything being done? Can anything be done? Can I do anything?

Possible discussion topics:

--The power of science, the power man feels through science.

--Man's responsibilities in the Twentieth Century.

XXII

From Ralph Korngold, Citizen Toussaint

(Toussaint Louverture led the Negro revolt in Haiti around 1800. He later became dictator of the government in Haiti).

"Man is unjust, more inclined towards evil than towards good."

Compare with reading XV, II.

--Do you agree with Toussaint? Do you disagree?

XXIII

From Black Elk Speaks, the life story of a holy man of the Oglala Sioux

Great Spirit, Great Spirit, the faces of living things are all alike. With tenderness have these come up out of the ground. Look upon these faces of children without number and with children in their arms, that they may face the winds and walk the good road to the day of quiet.

Discussion topics:

--What does this prayer tell you about this Indian's view of man?

--What does he want for his people?, for all of nature?

XXIV

Aristotle's ethics

"The happy life is thought to be virtuous; [it] requires exertion, and does not consist in amusement."

Do you think Aristotle's ideas about happiness are strange?

XXXI

E. E. Cummings: 92

no time ago
or else a life
walking in the dark
I met christ

jesus)my heart
flopped over
and lay still
while he passed(as

close as i'm to you
yes closer
made of nothing
except loneliness

What do you think the poet is saying?

CHARACTER

True worth is in being, not seeming--
In doing, each day that goes by,
Some little good--not in dreaming
Of great things to do by and by.
For whatever men say in their blindness,
And in spite of the fancies of youth,
There's nothing so kingly as kindness,
And nothing so royal as truth.
Alice Cary

DESITARATA

Go placidly amid the noise and haste, and remember what Peace there may be in Silence. As far as possible without surrender, be on good terms with all persons.

Speak your truth quietly and clearly; listen to others, even the dull and ignorant. They too have their story.

Avoid loud and aggressive persons, they are vexations to the spirit.

If you compare yourself with others, you may become vain and bitter, for always there will be greater and lesser persons than yourself.

Enjoy your achievements as well as your plans. Keep interested in your own career, however humble. It is a real possession in the changing fortunes of time.

Exercise caution in your business affairs, for the world is full of trickery. But let this not blind you to what virtue there is: many persons strive for high ideals, and everywhere life is full of heroism.

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Be yourself. Especially do not feign affection. Neither be cynical about love, for in the face of all aridity and disenchantment it is as perennial as the grass.

Take kindly the council of the years, gracefully surrendering the things of youth.

Nurture strength of spirit to shield you in sudden misfortune, but do not distress yourself with imaginings. Many fears are born of fatigue and loneliness. Beyond a wholesome discipline be gentle with yourself. You are a child of the Universe, no less than the trees and the stars, you have the right to be here. And whether or not it is clear to you, no doubt the Universe is unfolding as it should. Therefore be at peace with God, whatever you conceive Him to be, and whatever your labours and aspirations in the noisy drudgery and broken dreams, it is still a beautiful world. Be careful...Strive to be happy.

(Found in old Saint Paul's Church,
Baltimore. Dated 1692.)

LET US GIVE THANKS

For the courage which comes when we call
While troubles like hailstones fall;
For the help that is somehow nigh
In the deepest night when we cry,
For the path that is certainly shown
When we pray in the dark alone,
Let us give thanks!

For the knowledge we gain if we wait
And bear all the buffets of fate;
For the vision that beautifies sight
If we look under wrong for the right;
For the gleam of the Ultimate Goal
That shines on each reverent soul,
Let us give thanks!

For the consciousness stirring in creeds
That love is the thing the world needs;
For the cry of the travailing earth
That is giving a new faith birth;
For the God we are learning to find
In the heart and the soul and the mind.
Let us give thanks!

For the growth of the spirit through pain,
Like a plant in the soil and the rain;
For the dropping of needless things
Which the sword of a sorrow brings;
For the meaning and purpose of life
Which dawns on us out of the strife,
Let us give thanks!

Ella Wheeler Wilcox

HAIKU

Haiku is an important part of a Japanese culture. Many Japanese even correspond with each other by means of these short, unrhymed poems. The rules for writing haiku are strict. The poem must contain seventeen syllables--five in the first line, seven in the second, and five in the third. A haiku must speak of something in nature and in some way suggest a season of the year. It is meant to suggest a feeling rather than describe something. The reader then fills in the scene by using his imagination. You may want to try writing your own haiku after reading the following examples.

Asleep in the sun
on the temple's silent bronze
bell, a butterfly.....
Buson

Washing my rice hoe
ripples flow away...as up
fly the piping snipe.
Buson

Of what use are twigs
but to sweep up a litter
of fallen petals?
Buson

The seed of all song
is the farmer's busy hum
as he plants his rice
Basho

Poor crying cricket,
perhaps your little husband
was caught by our cat
Kikaka

A hungry owl hoots
and hides in a wayside shrine..
so bright is the moon.
Joso

Beyond the dark trees
lightning flashes on water,
bright, like a vision.
Shiki

Excerpts from----WAITING FOR GODOT-----a tragicomedy in two acts by Samuel Beckett

Pozzo: (speaking to Vladimir and Estragon.) The tears of the world are a constant quantity. For each one who begins to weep, somewhere else another stops. The same is true of the laugh (He laughs.) Let us not then speak ill of our generation, it is not any unhappier than its predecessors. (Pause.) Let us not speak well of it either. (Pause.) Let us not speak of it at all. .....

Estragon: My feet! (He sits down and tries to take off his boots.) Help me!

Vladimir: Was I sleeping, while the others suffered? Am I sleeping now? Tomorrow, when I wake, or think I do, what shall I say of today? That with Estragon my friend, at this place, until the fall of night, I waited for Godot? That Pozzo passed, with his carrier, Lucky, and that he spoke to us? Probably. But in all that what truth will there be? (Estragon, with his boots still on, is falling asleep. Vladimir stares at him.) .... We have time to grow old. The air is full of our cries. (He listens.) But habit is a great deadener. (He looks again at Estragon.) At me too someone is looking, of me too someone is saying, he is sleeping, he knows nothing, let him sleep on. (Pause.) I can't go on! (Pause.) What have I said?

"The best way to get what you want is to want less."

"ON TRUTH AND TALK"

Discontent comes in proportion to knowledge. The more you know, the more you realize you don't know. --Will Rogers

Everybody is ignorant, only on different subjects. --Will Rogers

When ignorance gets started, it knows no bounds. --Will Rogers

We will never have true civilization until we have learned to recognize the rights of others. --Will Rogers

People's minds are changed through observation and not through argument. --Will Rogers

Everyone of us in the world have our audience to play to; we study them and we try to do it so it will appeal to what we think is the great majority. We all have our particular little line of applesauce for each occasion. So let's be honest with ourselves, and not take ourselves too serious, and never condemn the other fellow for doing what we are doing every day, only in a different way. --Will Rogers

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It is no effort for me to confess that he (Borges) has achieved some valid pages, but those pages cannot save me, perhaps because what is good belongs to no one, not even to him, but rather to the language and to tradition. Besides, I am destined to perish, definitively, and only some instant of myself can survive in him.

Jorge Luis Borges

CONFUCIUS AND THE WITTY CHILD

A CHINESE FOLKTALE

Confucius is considered China's greatest philosopher and teacher. Though he died more than 2400 years ago, his precepts about how to live happily, morally, and wisely are still held up as ideals. In the following folktale the great teacher, always willing to learn from others, learns a lesson from a child.

One day as the sage was riding in his chariot, he saw in the middle of the road a little child playing with some tiles, building a city. The boy saw the chariot coming, but he did not even attempt to move away. Confucius called to him. "Little child, aren't you going to give way for my chariot to pass?" The little child looked up and answered, "Not so, sir. You see, I am building a city. A city wall does not give way for a chariot, but a chariot goes round the wall." What a bright answer! Confucius immediately stepped down from his chariot and approached the child, saying, "Little lad, you seem to be uncommonly clever for your years." The child answered, "How so? A hare at the age of three days can scamper over the fields, and should I not know a thing or two at the age of seven years?" Confucius smiled; then he said, "May I ask you a few things?" "I am ready," answered the child. "Then," asked Confucius, "can you tell me what fire has no smoke; what water has no fish; what hill has no stones; what tree has no branches; what man has no wives; what woman has no husband?" The child immediately answered, "A glowworm's fire has no smoke; well water has no fish; a mound of earth has no stones; a rotten tree has no branches; a genie has no wife; and a fairy has no husband." As Confucius listened attentively to the words, the little child's eyes brightened in mischief as he continued: "And if you, venerable sire, will tell me how many stars there are in heaven, I shall know more than I do now." "My child, why do you ask about things so far away? said Confucious. "Ask me something near at hand, and I will tell you." "Then," said the boy, "pray tell me how many hairs have you in your eyebrows." Confucius was completely taken aback by the child's cleverness. He, the wisest of his race, could not answer the child's simple question! Silently he returned to the chariot and bade his man pull it around the city of tiles the child was building.

A Letter to William and Mary College

On June 17, 1744, the commissioners from Maryland and Virginia negotiated a treaty with the Indians of the Six Nations at Lancaster, Pennsylvania. The Indians were invited to send boys to William and Mary College. The next day they declined the offer as follows.

WE KNOW THAT YOU HIGHLY ESTEEM THE KIND OF LEARNING taught in those Colleges, and that the Maintenance of our young Men, while with you, would be very expensive to you. We are convinced, that you mean to do us Good by your Proposal; and we thank you heartily. But you, who are wise must know that different Nations have different Conceptions of things and you will therefore not take it amiss, if our Ideas of this kind of Education happen not to be the same as yours. We have had some Experience of it. Several of our young People were formerly brought up at the Colleges of the Northern Provinces: they were instructed in all your Sciences; but, when they came back to us, they were bad Runners, ignorant of every means of living in the woods...neither fit for Hunters, Warriors, nor Counsellors, they were totally good for nothing.

We are, however, not the less oblig'd by your kind Offer, tho' we decline accepting it; and, to show our grateful Sense of it, if the Gentleman of Virginia will send us a Dozen of their Sons, we will take Care of their Education, instruct them in all we know, and make Men of them.

SUN CHIEF

Born in March, 1890, Sun Chief grew up among the Hopi in Oraibi, Arizona. In his youth, he attended the Sherman Institute in Riverside, California, where he acquired a good knowledge of English and adapted quickly to the white man's ways. However, he later returned to live with his people in Oraibi. Between 1938 and 1941 he wrote the story of his life; the following extract is a comment on his early experiences.

I LEARNED MANY ENGLISH WORDS AND I COULD RECITE PART OF THE TEN COMMANDMENTS. I KNEW HOW TO SLEEP ON A BED, PRAY TO JESUS, COMB MY HAIR, EAT WITH A KNIFE AND FORK, AND USE A TOILET.... I ALSO LEARNED THAT A PERSON THINKS WITH HIS HEAD INSTEAD OF HIS HEART.

--From TOUCH THE EARTH--A SELF-PORTRAIT OF INDIAN EXISTENCE
Compiled by T. C. McLuhan

EDUCATIONAL FILM SERIES

Hours: 62 (10/1/71--5/26/72)

Average Attendance: 25. Some students in the program attended regularly. Other students who attended at various times include Anita, Gladys, Christa, D. B., Arlette and Eva, throughout the year.

Methods: 16 mm films were shown each Friday for 2 hours at the YMCA to students and the general public.

Materials: A list of film titles obtained from the Great Falls Public Library, McDonnell-Douglas Communications Department, Mountain Bell Telephone Company and the Montana Power Company is included following "Observations."

Observations: This program was initiated in February, 1971 by Project Homebound Director Pat Harstead. It was a fine success in that the films shown were educational and, at the same time, entertaining. A majority of the viewers were Senior Citizens rather than students, but this series provided publicity for the Experiment at Butte. Interagency cooperation was necessary in the borrowing and returning of films. Film topics centered on areas of student and Senior Citizen interest. They appreciated the content of films on geography, history, anthropology, psychology, medicine, ecology, communications, literature, art and music. Many hours were spent selecting films, corresponding with agencies to obtain films and organizing publicity and written schedules.

EDUCATIONAL FILM SERIES
1971 - 1972

OCTOBER 1	MONTANA: LAND OF THE BIG SKY ALASKA HAWAII: TROPICAL STATE OF THE U.S.
OCTOBER 8	THE HOPI INDIAN CAVE DWELLERS OF THE OLD STONE AGE BRAZIL
OCTOBER 15	MARIJUANA DRUGS AND THE NERVOUS SYSTEM SILENT SNOW, SECRET SNOW
OCTOBER 22	AUSTRALIA CZECHOSLOVAKIA FIVE COLORFUL BIRDS

OCTOBER 29	GRAND CANYON COLORADO RIVER THE SOUTHWEST--LAND OF PROMISE
NOVEMBER 5	MONTANA HERITAGE WASHINGTON CROSSING THE DELAWARE
NOVEMBER 12	ILL WINDS ON A SUNNY DAY THE LIVING SEA JASPER HOLIDAY
NOVEMBER 19	BEYOND ALL BARRIERS THE INAUGURATION OF JOHN F. KENNEDY DISCOVER THE USA SIMPATICO
DECEMBER 3	THE GREAT LAKES--MEN, MINERALS AND MACHINES POLAND AND ITS PEOPLE WEST GERMANY: THE INDUSTRIAL PLANT THE CALENDAR
DECEMBER 10	A HISTORY OF TRANSPORTATION ANDRETTI
DECEMBER 17	CHARLES DICKENS THE SPIRIT OF CHRISTMAS
JANUARY 7	ECLIPSE OF THE QUIET SUN THE UNIVERSE
JANUARY 14	TOURING ALASKA WITH PAT HARSTEAD
JANUARY 21	SELAMAT DATANG MONTANA--LAND OF THE BIG SKY
JANUARY 28	PEOPLE OF THE NETHERLANDS HUNGARY AND ITS PEOPLE JOHN F. KENNEDY A TIME TO BEGIN
FEBRUARY 4	LITHOGRAPHS--A TRIP WITH CURRIER AND IVES NEW ENGLAND THE GREAT PLAINS THE GULF COAST
FEBRUARY 11	ERUPTION OF KILAUEA GOLD MINING GEYSER MELODIES
FEBRUAry 18	WASHINGTON--APPLELAND WILD FLOWERS OF THE WEST LAS VEGAS

FEBRUARY 25	SUN COUNTRY THE ROYAL SILK OF THAILAND MEDITERRANEAN REFLECTIONS
MARCH 3	LOUISA MAY ALCOTT CALGARY STAMPEDE ANIMALS OF THE PLAIN
MARCH 10	THE MANY FACES OF MEXICO VENEZUELAN ADVENTURE
MARCH 17	THE HISTORY OF BUTTE
MARCH 24	NORTHERN HIGHLIGHTS TO CATCH A DREAM AN ISLAND PARADISE--MALLORCA
APRIL 7	THE AMERICAN WOMAN AND SOCIAL CHANGE VISION QUEST GLACIER PARK THE BUFFALO
APRIL 14	LITHOGRAPHS--A TRIP WITH CURRIER AND IVES DAME MYRA HESS FREE FROM CARE THE LAST CATTLE FRONTIER
APRIL 21	A SCRIPT FOR SCANDINAVIA OPERATION HEARTBEAT
APRIL 28	A LEGAL CRIME MEN OF DREAM TIME
MAY 5	MABUHAY THREE FACETS OF ADVENTURE
MAY 12	ASSIGNMENT YELLOWBIRD ISLANDS OF THE TRADE WINDS VALLEY OF THE SWANS
MAY 19	BIG MEDICINE THE WIND OF CHANGE
MAY 26	BEAR COUNTRY C'MON JET HAPPY
JUNE 2	CHARLIE RUSSELL--COWBOY ARTIST
JUNE 9	ALASKA EARTHQUAKE FLATHEAD LAKE
JUNE 16	TROPICAL AFRICA COLUMBIA RIVER

Butte, Montana
Experiment At Butte 309 B
1971-1972

Name ____________________

Vita: White, male, age 48, born in Holland.
Completed 7th year of school in Holland.
Received 66 hours of instruction, Sept. 27, 71 to May 26, 72.
Student Survey Scores: Test B, taken in Oct., Reading Comprehension 4.4, Word Recognition 7.8, Arithmetic Computation 7.2, Arithmetic Problems 7.8. Test A, taken in May, Reading Comprehension 6.5, Word Recognition 7.8, Arithmetic Computation 7.2, Arithmetic Problems 7.2.
Experimental student.
One pre-school child, age 8.
Second year in program.
Home environment distracting, due to neighbors, children, and pets.

Accomplishment: Basic student. Studied English, math, spelling, and the experiment. No specific goal. Wanted to study subjects which would enable him to help his child with his school-work. Spelling, pronunciation and sentence structure have improved. Enjoyed math. Started with fractions and has progressed to geometry. Liked experiment and discussion. Thinking has become more logical since he has done the experiment.

Methods used: He and his wife had home, weekly class. Gateways to Spelling, Language Exercises I, Basic Essentials of Math II, and experimental works were the materials used.

Experiment at Butte
1971-1972

Name ____________________

Age: 52
Sex: Female
Place of Birth: Ritterhude, Germany
Nationality: German (Naturalized American, 1971)
Number of Children: Pre-School 0
Elementary 0
Secondary 1
Occupation: Grocery store keeper

BEST COPY AVAILABLE

Education: Completed grade 8 in Germany; attended Butte Business College in 1952; participated in Project Homebound (11/19/70--6/18/71).

Hours of Instruction: 201 including 44 hours (10/13/71--2/15/72) at the neighborhood center. (9/20/71--5/26/72)

Experimental - Basic

Methods: Two hour group sessions with a Greek woman and another German were held weekly in the teacher's home. Communication skills were developed. Weekly tutorials were held in her home for 2 hours concentrating on her needs in reading, grammar and basic math.

Materials: Engligh as a Foreign Language Conversation manuals (1 and 2); "You and Your World" newspaper; selected readings for "The Experiment at Butte"; "Montana Constitution"; Communications: The Transfer of Meaning; Learning and Writing English; Learning Our Language (Book 2); dictionary; spelling lists; Title III Math worksneets; Basic Essentials in Math (Part 1).

Accomplishments: She has achieved a great deal of satisfaction in realizing that she can read from Plato and the Bible and other materials and share her observations and feelings with other students. She has benefited in exposing herself to these readings and other students. She gave several fine oral presentations on the subject of her interest. She attended the "Civilization" film series at Montana Tech and viewed the Montana Constitutional Convention in session. She wrote her impressions of both events. She registered to vote. She used writing skills to create an ending for a story in the "Know Your World" newspaper. She received "first place" in this area for her effort.

Observations: She is enthusiastic about learning. She has been conscientious and highly motivated during the year. Spelling, map reading and using correct English present a challenge to her. She would like to continue her studies so that she will be able to take the GED exam. She attended the neighborhood center this year, somewhat irregularly, noting that her store hours and other responsibilities kept her from attending twice a week. She felt that the students at the center were too advanced for her.

Follett Student Survey Test Results:	Preliminary (Form A) Grade Equivalent	Follow-up (Form B) Grade Equivalent
Reading Comprehension	3.8	5.5
Word Recognition	4.5	5.6
Arithmetic Computation	4.4	5.6
Arithmetic Problems	5.1	7.6

Name ____________________

Age: 37
Sex: Male
Place of Birth: Cullman, Alabama
Nationality: American

Number of Children:		
	Pre-School	-
	Elementary	3
	Secondary	1

Occupation: Truck driver

Education: Completed grade 4 in Alabama; participated in Project Homebound (2/11/71--5/27/71)

Hours of Instruction: 64 (10/4/71--5/26/72)

Experimental - Basic

Methods: Group instruction was offered once or twice a week for 1 or 2 hours with his brother-in-law at his home. He attended some classes at the YMCA with a group of Mexican American students and he had several tutorials, according to his work schedule. Reading, discussion and writing and arithmetical skills were emphasized.

Materials: "Know Your World" newspaper; selected readings for "The Experiment at Butte"; newspaper cartoons; spelling lists; driver's manual and driver education worksheets; Basic Essentials in Math (Part 1); Title III Math worksheets; Steps to Learning (Books 1 and 2); I Want to Read and Write; Dr. Spello; "Scrabble."

Accomplishments: He could write his name and a few spelling words and some simple sentences in October and he could add one-digit numbers. Now he is able to read and discuss short selections designed for "The Experiment at Butte." Selections which interested him, although at a higher reading level, were read orally by his wife or the teacher. They shared observations and impressions and requested that other readings be considered. He can now add, subtract, multiply and divide four-digit numbers. His Florida driver's license expired so he is going to take the Montana driver's exam orally on May 26. He and his wife registered to vote.

Observations: He is convinced that education benefits the individual who is trying to serve in the community. (He is president of

Allied Citizens of Tomorrow and is active in the Group Health Association of Montana.) The learning process was never easy in Alabama for him 29 years ago. Learning is not easy for him now but he applies himself well. He wants to continue studying and is hopeful that he will have more time to devote to assignments. His wife sometimes assists him in his work.

Follett Student Survey Test Results:	Preliminary (Form A) Grade Equivalent	Follow-up (Form B) Grade Equivalent
Reading Comprehension	4.0	4.4
Word Recognition	3.9	4.7
Arithmetic Computation	3.3	5.0
Arithmetic Problems	3.8	4.8

Butte, Montana
Experiment At Butte 309 B
1971 - 1972

Name ____________________

Vita: White, male, age 20, American born. Attended special education classes for 3 years. Received 108 hours of instruction. September 29, 71 to May 25, 1972. Student Survey Scores: Test A, taken in October, Reading Comprehension 2.8, Word Recognition 1.2. Test B, taken in May, Reading Comprehension 5.8, Word Recognition 4.4, Arithmetic Computation 5. Experimental student. No pre-school or elementary school children. Home environment very distracting due to pets, the baby and constant interruptions from other members of the family.

Accomplishments: Basic student. Slow learner. Studied English, math and reading. His reading comprehension, word recognition and sentence structure have improved greatly. Also is doing very well in basic math. Main problem is pronunciation. Seems to have a speech defect. Another problem is his inability to transfer his thoughts into words. Does fine when he writes an answer, but when asked to answer orally he can't do it. Tried to experiment using very simplified materials but it didn't work due to his shyness, inability to put his thoughts into words and because he is not capable of any type of discussion involving reasoning or logic.

Methods used: Studied in bi-weekly, tutorial class in his home. Dr. Spello, Adult Basic Reader, Learning Our Language I, student newspapers, Basic Essentials of Math I, and experimental works were the materials used.

Experiment in Butte, Montana
May 26, 1972

Name____________________

Age 36, Female, Japanese-born
In control group for Experiment - Basic student
Total hours: 204 (5/4/72)
Tests: 9/22/71 Adult Reader basic test (Grade 3)
Excellent in fill-in blanks, unsatisfactory in oral reading.
10/7/71 Student Survey Form A

Grade equivalent:	Reading Comprehension	7.4
	Word Recognition	5.1
4/71 (Arithmetic only)	Arithmetic Computations	5.5
	Arithmetic Problems	7.9

10/11/71 (Phonovisual Diagnostic Test)(Grade 3) 14 errors
Score: 40%

Materials: She is now working in:
Dr. Spello; How to Read Better I (Grade 5-6); Language Exercises (Grade 5); Basic Math II (Grade 4)

Supplementary: Basic skill reading sheets; Know Your World newspaper; Consumer buying guides; Recipes and Literary selections in English Club World Book and Childcraft

Comment: She is a busy mother with 3 school-age children, who are involved in many activities; she sews daily to supplement the family income; and she works 2 nights on the week end in the kitchen of a Chinese cafe; consequently, she does no homework and no self-study altho she has a great desire to learn. She wanted as many lessons as we could provide on an individual basis. She has attended group classes by attending English Club regularly.

Progress: She was not reading at the level indicated by the Student Survey score. She was retested with the Phonovisual Test to diagnose her reading difficulties. She has now completed I Want to Learn English (Grade 4) (final test: excellent) Completed Learning & Writing (Grade 3-4); Basic Math I

Note: She has 3 elementary school children.

Name ____________________

Age 30 Native North American; born in Lewiston, Idaho
GED Experimental student 43 and one half hours of instruction

Materials: Math 2 Steck Vaughn
English 2 Steck Vaughn
Reflective materials: Borges, "Black Eagle Speaks," Plato, "Myth of the Ring," Touch the Earth, Six Nations, "New Man of America," Malcolm X, Thoreau, Walking
Webster Reader

Accomplishments: Math--progressed through percentage, basic geometry and is now beginning work with algebra.
English--Can recognize good sentence structure and parts of speech
Has improved her vocabulary somewhat.
Has handled many conceptual readings well.

Problems: No learning problems, except that, having only been with her for a month, I wasn't able to give her much direction, outside of math, because she knows basic English.

Recommendations: She is and has been in some ways outside the mainstream of middle class life. Her husband was without work for about a year and the family was supported by welfare. She voices many opinions in disagreement with the status quo. In this way, I think the reflective materials used encouraged and stimulated her. She doesn't recognize many terms used for instance in education, political science, philosophy (i.e., liberal, conservative, pragmatic, idealist, etc.) which puts her at some disadvantage in reading, but she analyzes well. Perhaps she would enjoy and benefit from some kind of language arts program or directed reading.

Significant others: Husband
3 pre-school children
2 school children

Measurements:

Adult Basic Education Student Survey		
Reading Comprehension	no score	
Arithmetic Computation	7.4	
Arithmetic Problems	7.6	
High School Fundamentals Evaluation Test		
Reading Vocabulary	61 pts.	12 plus
Reading Comprehension	64 pts.	12 plus
History and Social Studies	51 pts.	10th

She has completed grade 9; she will take her GED in June

Student Evaluation

Date Entered: 11/17/71 Date of Evaluation 5/11/71
Total Hours of Instruction 88

Name: ____________________
Age: 42
Sex: Female
Place of Birth: Butte, Montana

Children: Pre-school
Elementary 1
Secondary

Control Group: Non-experimental Student
Grades Completed: __________
Tests-Follett A.B.E. Student Survey: Pretest Form A Pretest Form B
Reading Comprehension: 7.4
Word Recognition: 7.9
Arithmetic Computation: 6.0
Arithmetic Problems: 7.8

Goal(s) G.E.D.

Materials Used: Basic Mathematics Books I & II; Our Constitution; English Essentials; Interpretations of Literary Materials; Basic Science Books I & II; newspaper, You and Your World; General Mathematical Ability; Spelling list of 300 most difficult words; Maps. Teacher prepared materials.

Comments: She has received class instruction at our Y.M.C.A. Center biweekly. She studies hard and applied herself to any task with vigor. She is going to take the G.E.D. in June. I felt she was ready in May but she wanted to continue with her studies for another month.

Student Evaluation

Date Entered: 10/13/71 Date of Evaluation 5/26/72
Total Hours of Instruction 78

Name: ____________________
Age: 24
Sex: Male
Place of Birth: Niagra Falls, N.Y.
Ethnic Background: American
Occupation: Driller, ACM
Children: Pre-school 1-6 mos.
Elementary none
Secondary none

Control Group: Non-experimental Student Yes
Highest Grade Completed: 9th

Tests-Follett A.B.E. Student Survey:	Pretest Form B	Pretest Form A
Reading Comprehension:	7.5	
Word Recognition:	6.5	
Arithmetic Computation:	6.2	
Arithmetic Problems:	6.7	
Date Administered	10/13/71	

Goal(s) GED certificate

Materials Used: Adult basic workbooks on English grammar and mathematics, teacher-prepared handouts in spelling, vocabulary, English grammar, algebra and geometry. Adult reading material in natural science & social studies, and materials on poetry.

Comments: This man's spelling is atrocious, and his verbal expression ability is very poor. His reading ability is, surprisingly, quite adequate. His ability in mathematics is increasing. This student has been very diligent in attending biweekly group instruction at the Neighborhood Center. He is a hard working conscientious type of student and he plans on taking the GED test in June, 1972.

Commercial Materials

American Education Publications Reading Success Series, score 1-6.
Phonix and word power, program 1-3
Newspapers: Know Your World, You and Your World.

Allyn and Bacon, Inc.
Refresher Mathematics with Practical Applications

Cambridge Book Company
Mathematics, Book I
A Basic Course, Book II
Work-a-text Business Arithmetic
GED Handbook of the Basic Sciences

Cowles
Correctness and Effectiveness of Expression
Interpretation of Literary Materials
Interpretation of Reading Materials
Interpretation of Reading Materials in the Natural Sciences
Interpretation of Reading Materials of Social Studies
Preparation for the High School Equivalency Examination

William Kottmeyer
Dr. Spello

Loft
Following Directions
Locating the Answer
Using the Context

Regents
English Workbook, books 1, 2
English as a Foreign Language Series

Simon and Schuster Publishing Co.
Blue Book of Spelling
Beginning Lessons in English (Dixon)
Exercises in English Conversation, Books 1 and 2 (Dixon)
Second Book in English (Dixon)

Steck-Vaughn Company
Algebra Book I
Adult Basic Education series
Continuing Adult Education series
Reading series
English series
Spelling and Handwriting series
Mathematics series: Books 6 and 7, Working with Numbers, Refresher, and Modern Practice in General Math
Social Studies series: Our Democracy, Rev., Our American Constitution, World History Review.
Phono Word Wheels

University of Michigan Press
An Intensive Course in English
English Pattern Practices
English Pronunciation
English Sentence Structure
Vocabulary in Context

Waldhorn and Zeiger
English Made Simple

Naturalization Students especially used the following:

American Government by the Monarch Press; American Citizenship by Soloman Wiener; American Citizenship by the American Legion Post No. 1, Butte, Montana; Constitution of the State of Montana; D.A.R. Naturalization Manual; House Document "Our American Government," No. 92-31 by U. S. Government Printing Office.

Other materials used with some students were magazines, city newspapers, Drivers' Manuals, the telephone directory, and others.

INDIVIDUAL TEAM EVALUATIONS OF THE PROGRAM

FINAL REPORT OF TEAM ONE

(CONTROL GROUP)

TEACHER: VERNETTA KOMMERS

TEACHER AIDES: GEORGIA BECKY AND JUNIE MALONEY

Students

This team tried to fit the learning process to the student by using a variety of approaches to reading. Length and depth of reading material was related to the level of reading ability and high interest of the student. Independent performance of basic reading and writing skills was a goal for most of the team's students.

The number of students totalled 27, including two transfers from another team who wanted remedial reading. Twenty were very basic, either as remedial students or as students learning English as a second language. Seven passed their naturalization exam and 4 more will take it when they have completed residency requirements.

Regular attendance rather than permissive phasing in and out aided continuity of the groups, learning proper background information, and developed thoughtful discussions. Because of being in an older age group and having more life experiences than her students, the teacher tended to be involved in problem-solving situations of her students as related to personal matters such as health, finances, social contacts, child-care, and everyday family problems of the disadvantaged. These required solutions before a good learning atmosphere could be created.

Dropouts

Dropouts were not a problem on this team. Meeting individual needs seemed to be the solution for retention. Three students dropped, one being the oldest student in the project (age 74) who broke his hip, but was not overcoming his illiteracy after having been in Homebound one year previously. The second student had been in a mental institution before enrolling. The third dropout secured employment so she had no time for lessons.

Aides

The aides were both clerical as well as instructional. They needed more background to tutor in building basic reading skills or to lead discussion. Consequently, the teacher held special reading methodology classes for the team and learning packages were developed together for use in individualized instruction along with commercial workbooks.

The teacher led discussions in the groups. Perhaps the maturity of the adult student, as well as his educational level in comparison to that of the aide, determined the aide's confidence in leading discussion groups. Academic skills were successfully taught by the aides on this team when planned and prepared with professional help.

The team would have liked instruction and guidance from the consultants on how to develop reflective thinking or any kind of in-service training related to the goals of the project.

Materials and Grouping

Preparation of materials for individualized instruction within a group and for the group discussion itself required more preparation time than lessons for one-to-one situations. This control team was successful in grouping 2-8 participants in 4 groups.

One group of six Oriental and Mexican-American women met weekly or bi-weekly in the teachers's home to read and discuss world literary classics, as well as to provide an opportunity to become acquainted and to socialize. Folk tales from the native land of each student were particularly popular and were retold at home to their children. Films about Montana, Butte, and their different countries were well received and provided insight into the various cultures represented. Two dinner parties preceding the films gave students the opportunity to share their culinary arts and to taste delicacies of the ethnic populations represented.

In literary readings, the more highly educated students were in their own country, the more ready they were to contemplate; yet lack of English conversational skills and vocabularies was a barrier to communication. The ones who could write thoughts in tutorials to read aloud later to the group felt more confident, and also found an immediate practical use for developing reading and writing skills. Introspection was easier individually than in the group.

This particular class was a genuinely cohesive group with as great a desire for social recognition as for itellectual development. In their tutorials the family's economic status affected the length of time each concentrated, and depth of thought each demonstrated. Those women with small children who were also employed had a minimum of time to reflect or to develop basic skills.

A special lesson conducted by the evaluator, whose hobby is stamp collecting, and the team teacher combined philately and literature. The new editions of U. S. stamps recognizing the literary contributions of Edgar Lee Masters and Emily Dickinson, combined with a study of some of their poems, began an interesting hobby in which both the students and their families at home are now participating. Since the participants regularly receive correspondence from their native countries, the exchange of stamps has been a regular conversational vehicle at each group meeting. Characterizations in Master's Spoon River Anthology are favorites.

Political articles or editorials that were strongly biased were avoided in the naturalization and citizenship groups, because these students lacked the time and the skill to locate and use a variety of resources to counter ideas. Most of them are basic in English and cannot find reading at their level. Therefore, having the teacher locate materials presenting both sides of an issue made for a more factual, less emotional discussion. Since Montana delegates were writing a new constitution at this time, there was a wealth of informational material available in Montana newspapers and state publications. President Nixon's visits to China and Russia stimulated discussions on communism; the appointments of U. S. Supreme Court judges and cabinet members evidenced federal government in action.

As outlined in the proposal, "the basic responsibility of the teacher was to insure that new vehicles for delivering ABE skills be developed." These are filed in five packets:

1. Supplemental reading sheets for individual use. This includes pre-tests and post-tests designed for those who began as illiterates in Homebound last year, and for whom some record of progress can now be shown.

2. Government materials primarily on local and Montana government, and lists of its officials.

3. Practical materials for use in insurance, jobs, gardening, nutrition, credit, and ordinary English conversations.

4. Basic Reading target skill visuals: Pictures and Word Clues, Phonetic Analysis, Structural Analysis, Sight Vocabulary.

5. Short world literary selections at high interest, low level reading. This packet evolves around a central theme.

Maps, graphs, a portable blackboard, and the world globe were especially useful.
Student weekly newspapers at 1-3 and 4-6 grade levels were extremely popular.
Learning to read and to use classified ads in the telephone directory helped in locating services and places for individuals. Specific examples were: fumigators, painters, doctors, dentists.

Field Trips

Field trips are an essential part of relating material to life experiences. Depending on individual goals and problems encountered throughout the project, students were taken to the federal building, library, the FBI, the county courthouse, social security office, post office, banks, consumer services, county extension office, and employment agency. These were particularly suitable to acquaint the low socio-economic students and foreign-born with community services available. Accompaniment on the first visit to an office made ensuing visits easy.

Evaluation

Standard achievement pre-tests and post-tests (Follett Student Survey Forms A & B) were given to those students not just beginning reading. These diagnostic tests showed competencies, yet, some of these students were not functionally literate. These students were then taken back through basic materials of a remedial nature. Later they were re-tested with informal tests for grade levels 1-3 on phono-visual skills, sight word tests, vocabulary, oral reading, and word meaning. The results are in each individual's office file.

It takes from 150-250 hours of instruction to move the average English-speaking student through the primary reading level. Our students each averaged 72½ hours of instruction in this project, 77% of them being foreign born and still at primary levels. This report as outlined in the proposal is this "group's definition of its accomplishments."

FINAL REPORT OF TEAM TWO

(EXPERIMENTAL GROUP)

TEACHER: CARLIN GOOD

TEACHER AIDE: ALBERTA ROWE

The Experiment at Butte has been an exciting and effective project for the students, aide and teacher from Team #2. We assert that special readings and topics selected for use in The Experiment have served as innovative and valid alternatives for adult learners.

We humbly submit this report with the expectation that we may present information from a teacher-aide-student perspective concerning the Experiment at Butte. We realize this effort may duplicate what the project evaluator, Mrs. Pyfer, has submitted. The evaluator offered us a verbal summary of the report on June 2 and we concur with her observations and conculsions in application to our team and the experimental aspect of the project. It is worth marking the need, we think, for an evaluation performed from an objective viewpoint. Mrs. Pyfer has appraised The Experiment by interviewing a variety of sources with emphasis on student, aide and teacher observations. She has demonstrated objectivity and we are completely confident in her performance as evaluator even though she has had no prior exposure to adult basic education programs. Her efforts merit commendation.

During the year, we have noted that officials who came to Butte to learn about the project concerned themselves with meeting officials from the Butte Vocational-Technical Center and the Model Cities Agency. While this is necessary, we believe that only a glossy tunnel vision could have been gleaned during the "fact gathering" visits because students were by-passed and consultation of teachers and aides was the exception in all but one visit. We would like to recommend that time be allocated to convene with those whom we consider to be the substance of the program, thereby obtaining proper exposure and a peripheral vision from which to judge the value of the project.

When the Experiment at Butte was initiated last fall, we volunteered to participate. Efforts were directed toward enrolling adults interested in education at a basic, rather than high school, level. After preliminary interviews were completed with these students, and goals and aspirations were established, we attempted to suit their individual needs and wants using a variety of methods and materials. Some of the materials included selected readings compiled for the Experiment at Butte; "Know Your World" and "You and Your World" and daily newspapers; Barnell-Loft reader series; flash cards; English as a Foreign Language series and adult workbooks for math and English. A listing of materials and methods for one student is included in a sample evaluation in the Appendix of this report. An index of readings designed for The Experiment is also contained in the Appendix. These readings were used to help students develop reflective skills. By the end of May, 70% of the stable enrollment from Team #2 had become involved in studying these readings.

We are appreciative of the essential service rendered by consultants Dr. Tom Huff and Miss Gail Wallis. They offered inservice training and compiled materials for The Experiment. Teachers also compiled readings.

The enthusiasm and suggestions of the consultants toward engaging in The Experiment enlightened us although we realize their talents were under-utilized. Their effectiveness was impeded by a limited budget and opposition to the idea of The Experiment. The opposition was based on erroneous preconceived notions and misunderstanding of the meaning of The Experiment. Distorted perceptions prevailed and obstructed teachers from participating in The Experiment collectively until January.

Teacher, aide, and volunteers attempted to be resourceful and flexible. We had to demonstrate competence and patience. We established friendships and assisted students when they requested aid or advice. It was imperative for us to establish a balanced integration of the roles we played as friend, counselor and instructor. At times, we encountered a feeling that we were encroaching upon a student's personal situation. At other times, we felt we were eluding that situation.

In some instances, students have not been as reliable in terms of attendance as students in a formal learning situation who must comply. There were extenuating circumstances to which our students had to attend to. In order to teach, we had to accommodate their schedules. When the weather improved and the regular school term ended, we noted a decline in interest. We would like to continue teaching through June but a quarter of our students have already terminated because their children are home from school and they are going on vacation. A future program should terminate in May to coincide with the official end of the school term. Reports could be composed in June.

During the year we felt instruction became more effective by meeting with students twice a week or three times a week from 1 to 1½ hours in lieu of meeting once a week for two hours according to the precedent set in Project Homebound last year. Most students are not accustomed to concentrating their efforts for such an extended period of time. Another disadvantage of once-a-week sessions is that the student may not receive the amount of instruction required to achieve his goal. With such variables as illness, vacation, and absenteeism to contemplate, a student would be fortunate if he received seventy-four hours of instruction. That total is really minimal when student goals are considered. The majority of students have been enthusiastic and well motivated; however, we were unsuccessful in attempting to involve one fellow because of his dearth of motivation and conflict of priorities.

Students who gathered in groups found group meetings to be interesting and fulfilling. Those who wished to continue tutorials were able to schedule them throughout the year. Groups provided an opportunity for more discussing and sharing of views. There were five constant groups with 2 students and one group of 3. We arranged to include each student, if he was interested, in general gatherings for: 1) visiting the Constitutional Convention in Helena; 2) discussing experiences gained from visiting the Constitutional Convention; 3) attending the "Civilization" film series at Montana Tech; 4) attending the "Educational Film Series" sponsored by the Experiment at Butte and Butte Senior Citizens; 5) attending a City Council meeting. Those events, combined with an inner experiment meeting at the YMCA and a general student-teacher picnic and field trips to the Kelley Mine and the Mineral and Mining Museum drew us together as a Community of learners. Cultural barriers were removed and students became less inhibited. They exhibited self-confidence and were more willing to share ideas and experiences. We are interested in arranging more field trips and activities.

Volunteer teachers rendered reliable service. The senior citizen volunteer guided a 62 year old woman in practicing writing. She achieved her goal of being able to write good letters. Another volunteer helped a Mexican woman who came to the U. S. in January by meeting in session with the regular teacher and in private tutorials. The volunteers were not involved in the experimental portion of the program because the students were too basic. Other basic students, though not active in The Experiment, were able to progress in communication and arithmetical skills. Handicapped persons took the opportunity to enroll in the program. A forty year old woman was referred to us a "uneducable," yet the aide arranged to meet with her three times a week and teach her to print her name, recite and write the alphabet and work with basic sight words and pictures on flashcards. She reads grocery price lists because she has learned to count. This was made possible even though the aide had never had any special education training and the woman had never attended school in her lifetime. A blind student, not strictly qualified for the project because he completed high school, insisted on enrolling in the program because he participated in Project Homebound last year and enjoyed it. The aide dutifully read texts to him and interrogated him in study areas each week so that he could pass tests. He completed freshman year at Montana Tech and will enroll as a sophomore there next year.

We observed general progress with each student in communication and mathematical skills by comparing what skills students performed in September with what they could do in May. Students also evaluated their

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own progress and teacher and aide reinforced them. Student Survey tests were given when students were interested in taking them. The "Know Your World" word recognition inventory and oral conversation and exercises were presented. Progress was cumulative. Each student feels that he has derived benefit from this experience and each asked if he or she could continue in a program of this type next year.

During the first quarter of the project, nine students participated in The Experiment. In January, five other students were able to join as experimenters and in April two began reading and exchanging views on sources such as Sun Chief; Will Rogers and Johann Schiller. The Tussman model of The Experiment at Berkeley was modified so that it met a demand for relevance from the student's perspective. The ideal of arranging for students to engage in learning what they wanted and needed was pursued.

As a team we feel confident that the students in The Experiment have developed in terms of ability to think critically and independently and reflect. This observation is based on teacher and student judgment and with reference to guidelines on reflection and the humanities suggested by our program consultant. A statement of those ideas is summarized in Chapter One of this report.

We believe that The Experiment played a vital role in offering alternatives to the recently naturalized citizen who hated to read and declared she would not vote. She altered her opinions and decided that she should vote so her teacher gave her a ride to the polling place. Six other students registered to vote. Each student who applied himself achieved some tangible measure of success. Four women were frustrated and self-conscious because they could not write. They became encouraged by their progress in The Experiment. They decided to practice writing by composing an ending for a story which appeared in the "You and Your World" newspaper. One received a regional first award certificate and the others received honorable mentions for their creative endeavors. In May, the foreign-born woman who took first award in the story ending contest addressed herself to a problem in the "What Do You Think" feature which interested her when she read it in the "You and Your World" newspaper. She wrote a letter to the editor in regard to the use of Ms., Miss, or Mrs. She was surprised to receive an answer to her letter from American Education Publications.

Two miners whose formal education ended at grade 3 and grade 7 could not read in September. They met together for study. During the first quarter of the year, special readings which interested them were read orally by their wife or the teacher. In March they demonstrated that they could read simple selections drawn from the index of experimental materials. They could also read articles in the "Know Your World" newspaper. They engaged in fine discussion rather than argumentation. Teacher and students were encouraged by sharing observations. They also enjoyed playing "Scrabble." It is through participation in The Experiment, they say, that they were able to pass the written Montana State Driver's exam. One drove for 13 years without a license prior to passing the test. One of the fellows is more confident of his ability to work with a low income group and help them in the community. He has challenged Model Cities Agency administrators because they did not listen, in his opinion, to the citizens. A German woman feels that the progress she has made in learning English will enable her to take courses for credit in the fall of 1972 at Montana Tech.

We have accepted students as they are. They, in turn, seem more self-assured and more responsive to other people. They are more cognizant of their talents and positive assets. Our team aide describes the feeling which each student, teacher, volunteer and herself share. "It has been a touching experience to be able to work together and feel that we have guided students in some way, insignificant though it may be, toward attaining their goal."

We conclude that the approach demonstrated in the Experiment at Butte should be studied, evaluated, modified if necessary, and incorporated into other adult basic education programs to provide options for adult learners. The Experiment at Butte has proven to be well accepted and appreciated by students, teacher, and aide. The Experiment has advanced what some refer to as "relevancy" in adult education. We have witnessed, perhaps facilitated, a change in the meaning and application of education to adult learners. We feel liberated from a somewhat insular philosophy of adult basic education that has proven among students and teachers to be regressive.

We wish to encourage criticism and interrogation from others based on an understanding of our experience and the purpose of The Experiment. We are willing to report our experiences to those who are interested although the ultimate effect and value of this project may not be measured tangibly.

For students and teachers who have had the challenge and joy of working as experimenters, "education has begun to be experienced in terms of its power to liberate us from our unexamined assumptions." (A. N. Whitehead) The end of the official Experiment at Butte really defines the beginning of an opportunity for us to pursue and relate education to our living experiences.

Team Two Statistics

Total number of students	26
Number of students retained from Project Homebound	12
Number of new students	14
Total number of experimental students	16
Number of basic students	20
Percentage of basic students	77%
Number of intermediate students	2
Percentage of intermediate students	8%
Number of GED students (1 transferred to MDTA)	3
Percentage of GED students (2 transferred to a GED team prior to 1/3/72)	4%
Number of special students	1
Percentage of special students	4%
Number of students enrolled (as of May 26, 1972)	21
Number of foreign-born students	18
Percentage of foreign-born students	70%
Number of male students	11
Percentage of male students	42%
Median age	46 years
Median grade level (based on student application data and Student Survey Test)	5.5
Number employed	9
Not in labor force (retired)	2
Number of female students	15
Percentage of female students	58%
Median age	39 years
Median grade level	6.4
Number employed	6
Not in labor force (housewives)	9
Number of people in Model Cities Neighborhood	23
Number of students who left town (basic)	2
Percentage of students who left town	8%
Total number of student instructional hours	1478 (9/20/71 - 6/9/72)
Total number of student classes	955

FINAL REPORT OF TEAM THREE

(EXPERIMENTAL GROUP)

TEACHER: MARY MADLENA

TEACHER AIDE: TERRI BYRNE

The team's main goal was to teach basic and GED students to reflect using experimental materials. This goal was incorporated with teaching basic, foreign students to learn English as a second language, with teaching basic, slow learners to read and write and with teaching GED students preparing for their high school equivalency test. Other goals were obtaining citizenship and a driver's license.

The Experiment was not tried on all students because: (1) Some of the basic, Chilean students did not speak or understand any English. (2) Most of the GED students felt they did not have time while preparing for their test.

Experimental Students

Eleven students were involved in The Experiment. Nine were basics and two were GED. The basic experimental students ranged from slow learners to a Chilean student with one year of college. The GED experimental students were at the same grade level.

None of the three slow learners were grouped. Therefore, it was difficult to start a discussion. However, as they became accustomed to The Experiment there was no problem. One was incapable of discussion at any level. However, we discovered that he drew cartoon characters very well and enjoyed it. His reflection consisted of drawing these characters and writing captions for them or writing different captions for comic strips which were cut out of the newspaper. The second slow learner liked The Experiment, but his thoughts were often illogical. Gradually with simplified materials his thoughts became more reasonable. The third was not able to read. Therefore, I read the material to her. Her abilities to discuss and reflect were far in advance of her general educational development level.

The Experiment was a challenge to the foreign basic students because of the language barrier. However, it was definitely a success for all of them because it improved their word power as well as their reflective skills.

The students from Holland were very opinionated. The Experiment suppressed this by making them see both sides of a situation. The Chilean students felt self-conscious revealing their thoughts when when The Experiment was initiated. After my teacher aide and I gained their confidence they were able to reflect at a higher level than our other students. This was only natural, since both had more education than any of the other students.

Pre and post Student Survey Tests were given to all of these students, except one. Each student's reading comprehension and word recognition scores showed improvement on the post test.

The two GED experimental students, husband and wife, studied reflective material relating to social studies. One has taken the GED but has not received the results. The other will take the test this summer. Both would like to study nothing but experimental materials next year, if this program were to be refunded.

From my experiences teaching The Experiment I have found that all students are capable of reflection at some level and that reflection can be done on any kind of subject matter. Also, the more experiences one has with which to relate, the easier it is for him to reflect. If a person has a few experiences with which to identify, however, it certainly does not mean that he is incapable of reflection. Reflection is a person's thoughts, ideas and opinions, which everyone has.

Students who did The Experiment seemed more enthusiastic toward class than my non-experimental students. It broke the monotony of math, English, spelling, etc. They enjoyed it not only because it was new and different to so many of them, but also because their preconceptions were questioned, which was a constant challenge to them. After a few classes they began to like this challenge.

Non-Experimental Students

Basic foreign students who speak no English are very difficult to teach. Progression is based on motivation and contact with the English language. Classes were grouped according to friendships rather than grade level. This proved successful since one student was usually more advanced and was able to act as an interpreter.

All except one of my foreign speaking students have progressed to an intermediate level in English. They have advanced because they have a specific need to learn English and have a certain amount of contact with our language. The one student who did not progress showed no motivation. She depended on others to interpret for her.

We took field trips to the library, Clark Mansion, Kelley Mine and the Columbia Gardens. Films were shown at my house and their houses. During these outings and classes speaking Spanish was kept to a minimum.

One of our 3 non-experimental GED students took the High School

Equivalency Test. She has not as yet received the results. One will take the test next year and the third has transferred to the Vocational-Technical Center.

I feel that students studying for their GED are too goal oriented. They care about the diploma, not what they learn.

Two of our students were studying for their citizenship. One moved to another city where she planned to take her test. The other changed her mind in mid-course. Our Chilean students had no desire to become citizens as they have not been in this country long enough.

One student has obtained her driver's license. This was her main objective and consumed most of our time. She is a widow and I was her only means of obtaining this goal.

Two of the students registered to vote and voted in the last election.

Summary

Throughout the year we had twenty-seven students. We now have eighteen. Three moved to another city, three transferred to other programs, one felt two hours of class on a Friday night were not enough and two could typically be called "dropouts."

Overall, our eighteen students, (five men and thirteen women) were very responsible. With the exception of one, absenteeism was never a problem. Most would cancel other activities before they would cancel their class. The basic students very definitely had a need to learn to read and write or to learn English as a second language and the GED students would not miss class for fear of prolonging the taking of their test.

Most of our students had friends or relatives also studying in the program. This gave them more motivation and a sense of competitiveness. We noticed this, especially, with our foreign-born students.

All the students came from varied backgrounds. I don't think their background pertains to their motivation. Students who came from poor backgrounds studied as diligently as students from above average backgrounds. Of course, the students who came from above average backgrounds progressed more rapidly due to the previous education they had received.

Recommendations

Each team should be entirely basic or entirely GED. Teaching both and The Experiment was extremely difficult as far as lesson plans were concerned.

The basic students could be divided into three categories, with a teacher for each: slow learners, students who wish to learn English as a second language, and students who have a normal mentality but have never had an opportunity to attend school.

The GED students could be divided into two categories with a teacher for each: intermediate students who have completed the sixth year of school and secondary students who have completed the ninth year or beyond in school.

FINAL REPORT OF TEAM FOUR

(CONTROL GROUP)

TEACHER: JIM CONNOLLY

TEACHER AIDE: MAYME HANNIFIN

VOLUNTEER: PAT HAYES

The primary objective of Team #4 in the federally funded educational program Experiment at Butte was to prepare students in their efforts to secure a General Educational Development Certificate. As an adjunct to this primary purpose, we also had a smaller group of students whose educational development was at or below the eighth grade level. Communication skills were stressed with this group concentrating on basic mathematics, writing, and reading skills. Elementary workbooks of the adult type were used to develop abilities in math and English grammar. Efforts were made to increase the student's capabilities in spelling and reading comprehension.

After the initial interview with a prospective student, he or she was given the Standard Adult Basic Education Student Survey Test which measures a person's ability in reading comprehension, word recognition, and arithmetic computation skills. The test results and information about a student's educational background were utilized to categorize students at a basic or high school level of academic standing. Those students who were working at a high school level were considered GED students.

The General Educational Development test is, at best, a narrow gauge of a person's educational advancement. Any student who completes high school has been exposed to anywhere from 400 to 2,500 hours more of formal instruction than the students involved in our program. This figure would vary greatly in individual cases fluctuating on how many years of high school, if any, the student himself had completed. For this reason to establish definite time limits on how long a person would have to spend involved in a program such as this before he or she attains a GED certificate is unrealistic. One student studying with this teaching team successfully passed the GED test after three weeks of instruction, while yet another received instruction for two school terms before she obtained her certificate. Several factors are involved here: individual ability, motivation, study habits, type of employment, and how long has the individual been away from school to mention but a few. Perhaps the most important factor would be what educational background the individual brings to the task. The more solid his background the sooner he will attain his certificate.

All of the students involved with this teaching team received biweekly, two hour sessions of instruction. Ninety minute sessions were found to work better, and were implemented during the course of the program. Grouping of students was utilized whenever possible, and these groups contained from two to five persons. Group interaction abetted the learning situation and should be employed whenever possible. The two exceptions to this would be the fast learner and the slow learner. Individual instruction is more effective with these two types of students as it allows them to proceed at a rate more in accordance with their abilities and limitations. (Grouping would probably be acceptable with these two types of students also, but we had a minimum of both of these types, and were thus unable to arrange satisfactory groupings among these types of students).

Adult education materials--particularly of the workbook type--were useful as source material. Teacher-prepared supplemental materials were used in mathematics, grammar, spelling, vocabulary, and poetry, and are recommended. The teacher-prepared supplemental materials develop curriculum, and they are also useful in areas where students need reinforcement.

Many of our student contacts have a poor educational ability self-image. This poor self-image is often much lower than their actual educational potential. They downgrade their formal learning ability, and this definitely hampers their scholastic efforts. To erode this self-defeating, poor educational ego impression held by many of these students is a constant challenge to the teachers and aides involved in this program. This problem is more prevalent here than in a normal school situation. Encouragement by the teacher is helpful, and actual student progress, as noted by the instructor, should be pointed out to the individual student as efforts are made to subdue his poor educational self-image.

Student attendance can be a problem, and is definitely one at Christmas and Easter time when absenteeism is rampant. This is unavoidable as endeavors, other than scholastic, assume more paramount positions in the lives of the students. Academic disinterest surfaces again during the middle weeks of June, and class cancellations by the student and absences are noted. For this reason project schedules should coincide with local formal school terms.

The aide on Team #4 could serve as the prototype of what a good aide should be. Mrs. Mayme Hannifin understood and presented to the students much of the textual material necessary in our program. She was most helpful in the office type work of teaching such as mimeograph chores, filing, records keeping, and detail work. She was unstinting in extending herself for the benefit of the student, and her acts of kindness and charity toward many students were much beyond the normal demands of duty.

Miss Patricia Hayes, the team volunteer, is a certified teacher in the local school district. She instructed two Mexican-American families--one in GED studies, and the other family, which was foreign-born, in their efforts to obtain citizenship and to increase their English speaking and reading ability. She was most reliable and did a very commendable job with both these families.

FINAL REPORT OF TEAM FIVE

(CONTROL GROUP)

TEACHER: JEAN LIND

TEACHER AIDE: ORVILLE BRAIN

Our team was one of the control groups. Our students were all GED goal-oriented with the exception of one. He was very basic and was handicapped. The GED course of study was set up on an individual basis for each student. The people who attended our neighborhood centers received not only class instruction but also tutorials in their homes. We did not group students in the centers as to their grade levels, but to the students' time schedules and to their accessibility to the centers instead.

At the beginning of the program we used the Follett Student Survey to test people who hadn't had any high school education. The Votow Fundamentals Evaluation Test was given to the people who had had some high school education. These tests, we felt, were good because the students do not pass or fail, but showed the students and the teachers what areas needed to be emphasized and areas that didn't need emphasis. Later in the program we abandoned the F.E.T. because the GED teachers felt it to be too long for people who had not been in school recently and, because it was a timed test, it added a pressure that was undesirable. The Student Survey was the only test we gave from then on, though we felt it was too basic for some. It did make testing consistant within the program.

The two areas given the most emphasis were reading comprehension and mathematics. If a student can understand what he is reading he then can answer questions on what he has read. The mathematics was started for each student at his grade level. Some students after a review had recalled past learning, but with others the basic operations had to be mastered before they could proceed. We used not only adult workbooks in both of these areas but also many materials in the home and centers, i.e., newspapers, magazines, measuring devices (cups, spoons, rulers, packaged foods etc.).

The students on our team who accomplished the most were the ones who were motivated by their strong desire to acquire a GED certificate. When a student expressed the thought that a GED certificate would change his socio-economic life style we pointed out that a GED is only one of the many means of bettering oneself and not a major remedy or solution to any problem.

The students who phased themselves out of the program were the ones who thought that by osmosis they could absorb the needed knowledge to pass the GED test. When they found out that only by putting time into their studies and attending classes would they be prepared for the test, they were even more spasmodic in their attending and studying. These are the people we could not reach. Some of the paths we took to solve this phasing out were that we made personal calls to their homes when they attended the center, tried shorter instructional hours with instruction in only two subject areas, changed from aide to teacher or vice versa, talked to the students' spouses to see if they could help, and gave them referrals to agencies who could help with their personal health problems. We brought back a few of these people into the program, but the majority left the program permanently.

The students who stayed with us and took the GED all passed, so we feel our team accomplished its objective: preparing students for their high school equivalency test. The people who did not take the test this year were not prepared to do so in both their own and our minds. We did direct students, who took and passed the GED test, to our counselor for vocational aptitude tests. The Employment Commission office was also pointed out as a place where they could be tested for their vocational aptitudes. So many of our students asked, "What now?" and this was one thing they could do to make them feel that there are still things to be done.

Because of last year's experience in Project Homebound, this year's adult education instructions were better organized and presented, thus giving us more time to develop individual instructions. We were more able to adapt materials to the students' backgrounds and to their needs, keeping the students' interest aroused and goal directed.

Our team felt there should have been more interactions within the program as a whole. More staff meetings could have avoided misunderstandings as to what was going on in other teams. When the administrators asked for evaluations and general information, had they called a staff meeting, all teachers and aides could have expressed themselves. Thus, an overall picture of what was happening in the Experiment at Butte could have been heard and drawn from.

Our team aide's views of the team and program were those of accomplishment. Freedom to develop materials was given and was tried. Some succeeded and some failed, but on the whole there were more successes than failures. As an example, the GED studies were given to a student who had spent time in a corrective institution and who had not had any high school education. The pre-tests showed his grade levels to be high enough for his starting the GED studies. When continued absenteeism and lack of motivation became obvious, another approach was taken. Lesson hours were shortened, and a personal touch was added. Rides to and from classes and outside activities, such as basketball games and odd jobs, replaced class hours. Now this student is asking for more instruction and we hope he will eventually acquire the necessary skill to pass the GED. With the help of the team teacher as well as the other teachers in the program, our aide has become more knowledgeable in the GED subjects, thus becoming a competent aide.

We find at the termination of the project that a good teacher-aide relationship has developed and, because of this, we were able to accomplish our objectives.

FINAL REPORT OF TEAM SIX

(EXPERIMENTAL GROUP)

TEACHER: LYNN HINCH

TEACHER AIDE: DULCIE ALLEN

The Teacher's Views

The Experiment at Butte is a program of adult education aimed at people who freely choose to continue some form of study, but for varying reasons, cannot pursue it outside the home. In our group (Team #6) the students are mainly classed as GED students, although there are some intermediate and foreign students. Most of the students take the GED exam within the nine-month period of study or less. Most students receive one visit per week, but some who have been preparing for the GED exam in less time have had two each week.

Study emphasizes math and language skills, but there are also inputs of science and government, in some cases. The experimental students were also exposed to reflective materials, usually taken from the humanities, but sometimes from political or sociological areas. These materials added new content while developing reading, language, and analytic skills. To some degree the use of reflective materials implements some ideas of Joseph Tussman in his Experiment at Berkeley.

In that the lessons follow a general pattern laid out by the texts and workbooks used, they resemble the general academic process, which in many cases the students had little success with. Offering alternative methods of study along the lines of individualized instruction and designing study especially relevant to students would heighten participation. Discussing with the students objectives and ways to attain them would help them become independent learners, assume more responsibility for learning and, in some cases, direct vague urges. I find that there is a tendency with me, as teacher, and them, as students, to become dependent on workbooks. In our group we haven't managed to carry out many group field trips, which would be a good alternative method. In the case of GED students who are highly directed toward obtaining the high school equivalancy, determining different methods would help relieve some of the tyranny of studying for the exam. Working toward the GED certificate can evolve into an isolated preparation to out-guess the odds. Nevertheless, the fact that this certificate is important to people reflects the feeling of a certain incompleteness or inadequacy that they have. Education would become more meaningful if this test were a way of manifesting certain skills and thinking processes that equip people to function in this society, instead of being an exercise in deciphering academic minutiae.

The wide range in background, interests, and abilities must be accounted for to some extent in planning and pacing study; perhaps this is why most of our students have one-to-one instruction. Provision was made in the proposal for grouping students in order to provide the exchange helpful to building a community of thought, but in Team #6 it was not carried out to the extent that would have brought about more interchange. In regard to the use of reflective materials, such grouping would certainly promote more discussion. It must be recognized that grouping adult students is difficult, particularly with mothers that stay home with children, because of scheduling and transportation.

The teachers and aides of the experimental group met once a week to discuss materials being used and the students' reaction to and

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discussion of them. Dealing with conceptual materials with adults was a new, tentative experience for me, and for everyone, I suppose, but entering the program late as a teacher, I found these meetings to be a learning experience themselves, exposing many ideas. I would say generally that people responded well to the use of reflective materials, with a few exceptions. Thorough introduction of the methods and concept of the reflective materials to both teachers and students would have prevented some misunderstanding which arose concerning the reflective materials. I entered the program in the remaining two months, while Dulcie had been in it from the beginning as an aide to Pat Cork. After Pat left, there was a period of about two months when Dulcie functioned as an independent teacher, working hard and keeping the team intact, and thus helped very much to orient me to the group.

The students in this group are among many so-called under-educated adults in Butte. The men, and some of the women, have adequate jobs. The majority of our students are women who do not work outside the home; many have young children. The fact that these students want to be in the program is significant. Generally these people realistically do not look to the GED certificate to promote their financial situation, but they do expect that it will give them more of an equal footing with the rest of society that so values education. Some of the women acknowledge dissatisfaction with the lack of interest, activity, input in their lives. I do think this program interrupts the monotony, provides stimulus to think and analyze, to consider ideas relevant to modern problems. Here particularly the reflective materials contribute to exercising and developing abstract and analytical thinking. For some, like the foreign students, the program provides the chance to meet and intercourse with native people and learn more about the environment, besides learning the language. For all, it is a needed contact with an important enterprise in American life--education.

The Teacher Aide's Views

Politicians, in my opinion, in the past had never faced up to the fact that the first thing that should be on the agenda for justice was the economic problem of equal wealth and power within America. The direct conditions of poverty, unemployment, bad housing, inadequate health care, no education, etc., remained the heart of the problems that faced this nation. The enormous wealth of America was unequally distributed among its citizens. Twenty per cent of American families earn between $1,000 and $4,000 a year, and seventy-five per cent of these families are white.

The Experiment at Butte has been, I feel, a step in the right direction toward correcting this situation; at least it is tackling one of the problems--that of education. We have had tutorial centers set up in churches and homes for adults from low-income families including Mexican-Americans, Indians, and also whites. I found when I introduced some of the philosophical readings to these people that they no longer felt intimidated. I had the opportunity of seeing that they, too, had their own ideas about things. Whether they agree with the philosopher or not was not the issue at stake, just as long as they could speak up and have an opinion of their own. I feel that it inspired self-confidence. They know they don't have to take just any answer the welfare worker or the landlord gives them.

I found these people thirsty for knowledge; the pride and self-satisfaction they gained when they could accomplish some academic task which they previously had found onerous, was non-measurable. The pride I felt in myself when some of these people gained a high school equivalency diploma was something that has been one of the most rewarding experiences I have had--to think I could help someone regain his confidence and probably his self-respect and to realize that he had become a useful part of society.